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ABSTRACT

A selection of papers presented a the Twentieth Annual Conference of the Australian College of Education, this delineates the present philosophies of education and work, and their connection, and suggests how some of these ideas are changing and must change to fit the society of the future. Part 1 presents twelve papers organized loosely under three themes: "The Changing World of Work," "The Individual and the World of Work," and "Education and the World of Work." Selected comments from group discussions and conference reviews also are presented. Part 2 examines the subthemes "From School to Work," "Post-School Education," and "Career Education" via five papers selected from the many submitted. A list of contributors with vitae is included. (KC)

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The Australian College of Education

20th Annual Conference

Perth, 1979

Education and the World of Work

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EDUCATION AND THE WORLD OF WORK

			Page
PREFACE			7
	PART I		
INTRODUCTORY PAPERS			
		H. S. Williams	11
		K. E. Beazley	19
	THE MAIN THEMES		
TOPIC 1	**The Changing World of Work**		
	Lead Paper	R. Jochimsen	25
	Lead Paper	Mary G. Gaudron	36
	Reactor	R. I. Viner	41
	Discussion	Selected Comments	47
TOPIC 2	**The Individual and the World of Work**		
	Lead Paper	G. Strauss	51
	Lead Paper	D. C. Dunphy	59
	Discussion	Selected Comments	87
TOPIC 3	**Education and the World of Work**		
	Lead Paper	W. Taylor	91
	Lead Paper	P. W. Musgrave	127
	Discussion	Selected Comments	139
CONFERENCE REVIEWS			
	Review 1	D. P. Bethel	143
	Review 2	R. C. Grant	147
	Review 3	H. S. Williams	149

EDUCATION AND THE WORLD OF WORK

Page

PART II

Transition from School to Work — C. Blakers 159

Those Between School and Work — J. C. Henderson 167

Youth — the Disadvantaged — L. R. Miller 181

Link Course Development in South Australia — J. A. Hill 197

Career Education: What Does It Mean in Australia? — C. J. Morgan 221

CONTRIBUTORS TO THIS PUBLICATION 247

PREFACE

This volume does not pretend to be a full record of the Fortieth Conference of the Australian College of Education held in Perth, Western Australia from 30 August to 4 September 1979. It is rather a selection of papers that were presented and discussions that took place at the Conference on the general theme of 'Education and the World of Work'.

It was intended that the publication be divided into two parts. The first part presents the major papers delivered at the Conference and selected extracts from the discussions that followed the presentations. These major presentations are organized around three sub-themes — 'The Changing World of Work', 'The Individual and the World of Work' and 'Education and the World of Work'. To these have been added two introductory papers that were presented at the opening session, and three papers that review the whole proceedings and pull together some of the threads.

The second part of this volume was to have presented thirteen papers selected from the large number that were given at the Conference either at public meetings or concurrent sessions. Although these papers were all related to the Conference topic, they were organized around different sub-themes — 'From School to Work', 'Post-School Education' and 'Career Education'. Unfortunately if all those selected had been printed the volume would have become too large. Therefore it was not possible to publish more than five papers in this part.

As is usual with a publication of this kind in which a selection inevitably has to be made, several gaps remain and there were many good papers that have not been used. Nevertheless the editorial committee hope that the reader will experience some of the interest and, indeed, excitement of those who heard the papers delivered by most distinguished people.

N. Dufty W. Neal E. Hinchliffe

INTRODUCTORY PAPERS

EDUCATION AND THE WORLD OF WORK
A MATTER OF VALUES
PRESIDENTIAL ADDRESS

H. S. WILLIAMS

It has been said that there is a simple answer to every complex question — neat, plausible and wrong. Of nothing, I believe, is this more true than of the relationships between education and the world of work. Why indeed should we imagine there should be simple relationships between two such substantial, complex and changing aspects of our society, each with its own objectives, its own areas of inertia and its own areas of momentum? Yet particularly in today's increasingly critical position with respect to youth unemployment, we hear confident simple assertions about the role of education both with respect to the creation of this problem and its solution. For these assertions much opinion but little firm evidence is produced. They often, incidentally, have the convenient effect of explicitly or implicitly absolving the proponent from any responsibility.

Concern about attitudes and expectations that were developing with regard to education and the world of work led the Western Australian Chapter of the Australian College of Education to propose this topic almost three years ago for the current Conference. We could wish we had not been so prophetic with respect to the significance that this issue would acquire in the time that has passed.

Three years ago, in so far as we as a community were concerned about our youth and their future in the world of work, it was generally thought that any emerging problems would conveniently go away with the next lift in the economy. This, we thought, could not possibly be too far away. Today the number of our young unemployed is much greater and we are much less confident about when the next lift in the economy will come. More of us are beginning to doubt in any case that any change we can foresee in the economy can possibly take today's youth employment problems away.

In December 1978 the Australian Industries Development Association, a national organization supported by industry, including most of Australia's largest industrial enterprises, published a document called "Understanding Unemployment". This was prepared by the Association's Research Centre. I commend this thorough and perceptive publication to anyone wanting to reach a fuller appreciation of the problem about which we are too short on facts. After critically reviewing the present position and the various solutions proposed, such as general stimulus to labour demand, wage restraints, restraints on labour supply, and sharing schemes, the document concludes

> Our analysis serves mainly to suggest that few of these solutions are either available, politically acceptable, or likely to achieve their intended results without quite severe adverse side effects. To a very great extent, international conditions are likely to restrain any fundamental and otherwise responsible expansion of aggregate demand in

8

> Australia. Other solutions that seek through means other than demand expansion to generate additional job prospects are found wanting in a number of critical respects.

The report continues,

> If, in fact, there is very little that can be done fundamentally to alter the employment scene in the short to medium term (i.e. into the early 1980s), then it is perhaps important that this position be understood, thoroughly and widely.

As one can gauge by the tone of these statements, this report is cast in relatively cautious terms. There are other well-informed commentators who see the problem continuing well beyond the early 1980s into at least the 1990s. They see superimposed on the economic problems of the day a variety of long-term changes affecting employment. What are some of these? Firstly, with the increasing number of women now engaged in or seeking employment, we are looking for jobs for a considerably increased proportion of the population. Secondly, technology is eliminating jobs which certainly in a time of limited growth are not being by any means fully replaced, even if they will be when times get better. Thirdly, a structural shift is taking place in the economy towards industries which by nature are more capital intensive. While our minerals industry is shaping up to go again, our manufacturing industry is under strong pressure of competition. These and other factors, including the presently large number of young people entering the work force each year, are the causes of the shortage of jobs which will almost certainly persist despite any economic upturn which can be foreseen.

You will note that I have not mentioned education as a factor despite a number of public criticisms claiming that education bears a substantial responsibility for the present unemployment of youth. Looking to schools and other education institutions to solve our social problems has been a not uncommon practice over the years. Is there a drugs problem? What are the schools doing about it? Is there a breakdown in parental control? Teachers should accept more responsibility.

When education has inevitably failed to produce the goods which often it was never capable of producing, it has then become the scapegoat — and education cannot in general produce jobs. It can make some people more employable, but in so far as the number of jobs does not increase, then those educated into jobs push others out, thus simply recycling unemployment. The contribution which education can make to overcoming the problem of unemployment is marginal. There are apparently shortages of skill at the moment in certain areas, as in the skilled trades, though the information available on particular needs is limited. By providing appropriate training, these shortages could be overcome and more jobs be filled. Better preparation of students in literacy and numeracy, and in an understanding of work and its demands may help to overcome a reluctance which has developed among employers to take on young workers. I say a reluctance which has developed since I do not believe that there is any evidence of significant deterioration in the educational standards of young people in the

past few years. The rate of juvenile unemployment has been about three times the general rate since the mid 1960s, that is for around some 15 years. There has been no change in this relationship yet one did not hear in the mid 1960s the criticisms which are now made. The main difference appears to have been that there were jobs then and the young people were wanted. Today jobs are short and they are not wanted.

I want to make it clear that I believe we in education have a responsibility to our students to bend every effort towards raising the levels of their knowledge, skills and understandings relevant to employment but I do not believe that this can have any substantial effect on the level of youth unemployment. This view is also affirmed in the recent report of the Williams Committee on Education, Training and Employment, the chairman of which, of course, should not be confused with me. Nor do I believe that educational institutions acting alone can make substantial or rapid progress on many current problems which they are expected to alleviate. Students do not learn only in schools. They learn from their homes, from their peer groups, from people they see around them, from the media, and indeed from all of their experience, whether we like what they learn or not. A number of these other influences are more persuasive educators than the school. Much is learnt in real situations which are frequently more compelling than the often necessarily contrived situations in educational institutions.

There are many of today's problems in which education can do no more than play its part in a total community response, and youth unemployment is one of these. It is for this reason that, in organizing this Conference, the College has placed considerable emphasis on public impact and public involvement as far as possible. It is for this reason that the College in all its activities is seeking to make a more substantial contribution to informed public debate on this and other educational issues.

It is my belief that any of the educational and training responses we can make to unemployment — though it is important we do all we can — taken on their own, can be no more than palliatives. The real question is what value we are prepared to place on providing jobs for our young people, and how far we are prepared to adjust our values to enable this to be done. For one thing, we need to broaden our concept of what we consider as estimable work in our society, and of what constitutes our real wealth. It is simply that we do not value as much as we should the great amount of work in our society which is not paid for by way of an income. And so when we ask women what they do there are those who will say, "I am just a housewife". If we are to value dignified work it must take in all the "unpaid" work which adds to human benefit. Much of it indeed adds a great deal more to human benefit than jobs for which others are paid, often quite handsomely. Here is a task for education — to help to give a better understanding of what makes for human welfare, or human wealth in the real sense.

More emphasis is beginning to be placed on community service as an alternative occupation for our unemployed young people. But while this is useful I do not see it as a sufficient answer on a voluntary unpaid basis. Money that one can rattle in one's pocket and that enables one to have to some reasonable extent the things money can buy — the things which are

presented so appealingly and profusely by our media, exploiting all the aspects of personal success and peer pressure — is in our society essential to the sense of self respect and personal achievement that comes for most of us by way of having a job. We can hardly blame our young people for having learned this from us. What I suggest is needed is that, to give all their self respect, we all share the paid work and share more of the unpaid work, each making our contribution to the total real wealth of the community in both spheres. Maybe too we have to consider paying for more of the currently unpaid work if we are in any reasonable time to give it legitimacy to solve a problem that is not just a threat of the future but is with us right now. Other countries are beginning to use paid community work as an alternative to the dole at little extra cost.

Sharing the paid work, however we do it, is going to mean sharing the wealth that pays for work — and there lies the rub. At present those of us in jobs are inclined to use the machinery available to us to protect and preferably advance our position with little regard for those who, through unemployment, are being denied their share. I do not accept the view which places the unemployed broadly as "dole bludgers" or living in wealth on unemployment benefits. Indeed, if some are prepared to find a satisfying life in unemployment without being socially destructive maybe that is just as well if there are not going to be paid jobs for all, and I fear that there is not going to be a rapid change in that situation.

Of course, continued substantial unemployment will not mean we are not going to share the wealth; but instead of sharing it constructively to give each of us the opportunity of dignity through work we will share it remedially to deal with the social and personal disorders of drug taking, violence, crime, depression and mental illness that we may expect as the outcome of chronic unemployment, quite apart from the tremendous costs of unemployment benefits.

There are tasks here aplenty for education — not just improving numeracy and literacy but also making a contribution to the development among people of an understanding of our interdependency one with another, fostering a greater sense of mutual respect and concern, and educating for the constructive use of leisure. Such changes in values are a prerequisite to any real solution of our unemployment problem. No economic solutions which might solve the problem will be politically acceptable without the change in values. But achieving this is not something for education alone. It is a challenge to the society as a whole.

There are some hopeful signs of some people being willing to trade income for leisure, and looking for a simpler way of life that is less demanding on the society and its resources. Some of them are expressing this in ways many of us do not find particularly acceptable, but maybe we should be listening more closely to the message they are trying to give us, whatever form its expression might take.

But let me turn to another aspect of "Education and the World of Work" and ask some questions about the world of work; for apart from the material aspects of employment, people are asking more from work life.

They are asking that work itself should be more life enhancing. Industry as I see it, using the word in its widest sense to cover all paid employment, is the way a society organizes itself to meet its needs in goods and services.

Without human needs to be fulfilled, industry would have no meaning. We can imagine a robot factory producing goods but if all the people who use the goods were suddenly wiped out and the factory went on working it would have no value or meaning. If then the ultimate purpose of industry is to add to human welfare, it seems reasonable that it should do this in its process as well as by its products — that those who give value and meaning to the product should not be devalued in the process of producing it.

Willard Wirtz, President of the National Manpower Institute in Washington and previously Secretary for Labour in the United States, has called for an economics which would start from a commitment to make the fullest practicable use of the most highly developed form of whatever talents are inside people instead of starting from the most profitable use, or misuse, of the elements within the thin and fragile crust of the planet.

Quite apart from unemployment there is a great deal of underemployment in work. Unemployment is, of course, only the limiting case of underemployment. We perhaps become most aware of underemployment when it is among the most highly educated, when we see graduates with many years of education behind them having to take jobs well below the level for which they have been prepared. But we must remember that at least they get jobs more readily than the less educated and that in getting jobs they push lower down in the pile those who have not had the same advantages. The underemployment of graduates is only symptomatic of an overall problem about which we should be equally concerned. The solution can only be one which puts people before products and which sees the valuing and development of people as a responsibility of the whole society, not just as another of the impossible tasks to be laid on the doorstep of the education system.

Let me turn to a practical example which will occupy our thinking tomorrow night — the transition from school to work. Much of what needs to be learned about this by those faced with making the transition cannot be learned in school. It can only be learned in the work place. Much of it cannot effectively be put into words but can only be learned from experience. The organizing of appropriate work experience can only be achieved by employers and schools working in concert and accepting a common responsibility. Employees are important in this too, for it is they who are observed by the young people and taken as models in the course of work experience. And after all, it is not education's children we are talking about but society's children and we all have a responsibility for them.

The wider responsibilities for education are not only seen in the transition from school to work. Today we are increasingly realizing that education is not something you get done with while you are young. We — all of us — have a continuing need for education to help us adapt to our changing world. When I refer to education here I am not thinking only of what we might call schooling. I have already indicated that people do not learn only in educational institutions. These have their place; but I suggest that in future

more recognized and planned learning will go on in the home, in the work place and in libraries, as well as through professional bodies, trade unions and other agencies. Education will become much more a concern of the whole community.

It will become an alternative activity for us all as we hopefully search for different life patterns which will give more opportunity of work to all. But this will only happen as we conceive of different relationships between education and the world of work. It was not without intent that the topic of the Conference has been stated in that way rather than "Education for the World of Work". I have already suggested that it is not practicable to think of the world of work as the given or constant to which education must adjust. The world of work is anything but given or fixed in the way which is commonly implied. It is itself a dynamic kaleidoscope constantly in a state of change, influenced by many factors including education itself. For instance, increasing levels of education have changed the demands and expectations of those entering the work force. These people now seek a greater level of satisfaction in their work situation.

I believe that we need to ask questions about the future of the relationships between education and work in a more fundamental form than they are usually heard. We need to ask not only how they relate to each other but also how they both relate to human development and welfare in the broadest sense. For this to happen means some shift from our current preoccupation with material values to a greater concern for the human values — with making people matter.

"That's all very well," I am told, "but you can't change human nature." You can, however, change human objectives and human behaviour. Otherwise what is education all about? It is true that the only proved catalyst of significant social change — at least the only one that is reasonably quick acting — is dramatic crisis. This is being evidenced today in the failure to face up to the emerging energy situation until it strikes, as it has done in the United States with dramatic force.

Nevertheless I believe that through education some progress can be made and foundations can be laid. The effect will be seen, but slowly at first. No doubt many of you are familiar with the S curve — that graph which climbs laboriously up a very slow incline and then suddenly takes off and you think it will go on forever. But it doesn't. It reaches some point where counter pressures of some sort or other make it level off. This is what happened to higher education through the 1960s and 70s.

In changing values in a manner that I consider is necessary to solve our problems in unemployment and underemployment, we are, I think, on that slow, laborious bottom line. There are evidences of upward movement. Increasing numbers of people are seeking greater satisfaction in human relationships. There is a growing serious consideration of industrial democracy. At international conferences on management that I have attended in recent years I have heard increasing emphasis on the social responsibilities of management. There is some evidence that schools are showing more interest in moral education, exploring human values and strengthening understanding

of social issues. But clearly none of this is working as fast as I believe is necessary if we are to deal with the problems in our society in providing not only some employment but also reasonably satisfying employment for all. We must not give up, however, or evade the task. We must continue to seek to climb that slow incline until the critical mass accumulates or our circumstances of life change in some dramatic fashion that makes it inescapable for us to adjust our thinking in some fundamental way. If we have then, however laboriously or however much without apparent reward, laid the groundwork for good solutions to emerge and be adopted, we will have done well.

We must at any point of time use whatever economic and educational methods are available to us to alleviate the situation in which we find ourselves, but we must not expect too much of these approaches on their own. Without the will to solve the problem and to face up to whatever adjustments solving it may demand of us, economics and education can avail little. And the will comes from our values — from what we consider important in our lives and in our society.

Education is under much scrutiny and criticism today and the dominant criteria which are being applied relate to the world of work. To some extent this is appropriate. Our jobs not only represent our livelihood but also play an important part in our personal sense of significance and identity. Occupation is one of the prime classifications we use in describing people. Education therefore has a responsibility to prepare people for work. But in reality today, and for some time to come as I see it, it also has a responsibility to prepare them as far as it can for the possibility of being out of work, which it appears many of them will experience for at least significant periods. For them this will present problems of values and expectations, but it seems hardly reasonable or realistic to expect those who are being denied the opportunity of work to make the whole of the adjustment, particularly when they tend to be predominantly those who have also had the lesser advantages at home, and at school. Surely in a world of work which is declining in relation to the available manpower, as of course it has been doing over the centuries with technological and social development, we should all share in the available work and in the adjustment which is called for from us by reduced working-time.

What is to be done? Firstly, I have already suggested that, while paid employment may be declining in its time demands per unit of the available work force, there is a great deal of work done or needed in the community which has not customarily been paid but which is contributing to our real wealth measured in terms of human well-being and satisfaction. We need, as I see it, to bring a new valuation to this reservoir of opportunity for satisfying occupation. I see great benefit to the individuals and the society in paying for useful social contribution of this kind rather than paying the dole. But most of all I believe we need to give this kind of work the dignity of social recognition as part of the legitimate work in our community so that no woman feels she must say "I am just a housewife" and every person when engaged in voluntary work of value to the society shall feel that this is as respectable in the sense of giving self respect and being respected by the

community as is paid work. In this way we can substantially increase the range of legitimate work to be shared between us.

Secondly, we need to see education as a legitimate alternative to work. This should not be achieved simply by keeping young people longer in educational institutions, often against their will, and shielding them from learning experiences in real-life situations which may well be more significant for their development. I mean that we should accept that education is an activitv which appropriately engages our attention at different points in our lifetime, resulting in various patterns of work and education throughout life to meet differing needs.

Thirdly, we need to look at the relationships between education and work in a much more sophisticated manner than that which is popularly proclaimed at present. This means not just in terms of literacy, numeracy and willingness to work but also in flexibility, versatility, social understanding and other such broader characteristics on which security and satisfaction, as well as efficiency and effectiveness in work depends today. We should be asking too how work can contribute to education in terms of human development.

Fourthly, we need to recognize that education must concern itself with more than work needs, particularly in a society in which work demands in the traditional sense are declining. The changing world of work itself demands that education must concern itself with laying the foundations for the wider needs of living in our society, with the use of leisure, with family life, and with citizenship in its broadest term, including our responsibilities one to another if we are to have a constructive society with a realistic recognition of the constraints on our resources and their use for our mutual benefit.

It seems to me that all I have had to say is summed up in the view that we can only solve our problems of education and the world of work with a shift from materialistic towards humane values — toward greater emphasis on making people matter.

I am too up in the air, you say. What about economics? Who is going to pay? No doubt discussions for the next few days will bring the issues down to earth and will grapple with practical problems. For tonight my thesis is that where there is a will, there is a way. "Maybe", you say. But one thing is sure, where there is no will, there is no way that will be effective or will be anything more than a palliative at best. And our will depends on our values. These we cannot just leave to education, economics, or governments. They present a personal challenge to each one of us and the answer lies with us all.

SPEECH ON ADMISSION TO HONORARY FELLOWSHIP

K. E. BEAZLEY

It is a privilege to be admitted to the Australian College of Education. It is the body most free to be professional in Australia in the field of education. Bernard Shaw once despairingly defined a profession as "a conspiracy against the public". I disagree. A profession has the basic characteristic of a commitment — a commitment to apply a body of knowledge, the skills of discernment, and valid techniques to meeting the needs of people. A professional commitment is not to a union, an association, or a standard of remuneration, or to maintaining the prestige of an occupation. It achieves its dignity in meeting needs of people.

Education is the target of a multitude of requests. The theme of your Conference "Education and the World of Work" implies a comparatively modest request — the preparation of students for a vocation. I have been looking at some other requests. Take this for instance:

> Man longs to be free, independent and responsible. It is the function of education to make him so.

Or take this one:

> Man has become a technological giant, but has remained a moral and spiritual dwarf. This is the basic challenge to education.

The Austrian psychiatrist, Victor E. Frankl, says that education must answer "the collective neurosis of our time", which he defines as

- **The fatalistic attitude to life** (I, the ordinary person, can do nothing to influence the course of events).
- **The provisional attitude to life** (let us eat, drink and be merry, for tomorrow we die).
- **The collective attitude to life** (man hiding himself in the mass, leaving responsibility to experts and leaders).
- **The fanatical attitude to life** (frustration leading to extremism, and the use of any means to achieve one's end).

The German philosopher, Karl Jaspers, makes a very difficult request. Education must bring about a change of mentality. It must pioneer the next phase in the evolution of man.

Statesmen from the third world tend to ask very concrete things of education. While the western world is witnessing an education explosion nearly 800 000 000 adults in the third world cannot read or write and the number increases by 40 000 000 a year. In some African countries up to 90 per cent are illiterate. UNESCO is bombarded with descriptions of this kind of situation.

The growth of crime and conflict has led to spiritual demands on education. Victor Frankl, quoted earlier, recently wrote:

> Today education must not confine itself to transmitting traditions and knowledge. Education must see its principal assignment and

mission in refining man's capacity to listen to his conscience. Then he will be equipped, even in an age of meaninglessness always to find meaning, that is to say, the unique meaning of each life situation. And out of his personal conscience he will, in addition, be capable of resisting both totalitarianism and conformism.

In London a class of lively 10- and 11-year-olds were asked what their school should do for their borough. The class wrote down all the ways in which their borough needed to become different and the things for which the school should work. They wrote in their consensus:

It needs to become tidy and clean.

It needs to be a place where people do not steal, and a place where you can trust each other.

No fighting or nastiness or keeping people out.

A place where people are kind to animals and do not hit cats or dogs.

A place where people do not waste their money, or keep things all to themselves, but share them.

With great zest they applied these ideas in the school, to the great joy of janitors, local authorities, police and the children themselves.

It is often said that schools are undergoing stress, but stress must be distinguished from strain, worry, pressure, or psychological tension. Stress, really, is the challenge from an environment, and education, like all living things, requires challenge from its environment. When the Plowden Report says that education must produce children who can be "the agents of their own learning" capable of going ahead under their own steam, it is really talking of children independently and progressively able to meet the challenges of their own environment.

I have the feeling that educators need to beware of throwing around slogans that young people may seize on with despair. One such slogan is "educated but jobless". As I understand the position, 28 per cent of those who leave school at 14, 6½ per cent of those who leave at 18, and 2½ per cent of those who graduate are jobless at present. I think that educators need to value every aspect of the personality and not to discount feelings in exclusive favour of intellectual capacities and vocational skills.

Our feelings are a form of communication. Sympathy, for instance, contains within it information about another person. Professor Hocking, of Harvard University, wrote — wisely, I think — "Our experiences of love and beauty have a decisive word to say. We speak of them as 'feelings'. What if they are also knowing? I suggest that they are such: that they afford an initiation into the nature of objective reality — in brief that they are, of themselves, not emotions only, but moments of metaphysical insight".

Education, like medicine, has to be *par excellence* a profession of the skills of discernment and valid insights, and discernment and insight are multi-faceted. It needs to be the least self-centred, the least self-important, yet the most committed of the professions.

The theme of your conference must be, in part, the compassion and insight to cut the Gordian knot of poverty leading to low educational attainment and low educational attainment leading to poverty; and the remedy must include the chance for re-entry to learning, and an amelioration of the poorer educational opportunity in rural areas.

The Commission of Inquiry into Poverty has a volume in its report series entitled "Poverty and Education in Australia", and in it one illuminating sentence based on survey sums up an issue for you:

> The stage at which young people leave school largely determines the nature of their future employment and income-earning power in our society is closely linked with the amount of formal education completed.

It will not alone be schoolmasters who will determine that this is so. Employment outside imposes the requirement.

There are other significant comments in the Report and this chastening one may be a vital note on which to end. After commenting that "those who stay on to complete the final year of secondary schooling will occupy jobs attracting a high income" and also that "they are likely to enjoy relatively more freedom in choosing a life-style which suits their personal needs and tastes", it proceeds to comment on the converse:

> For the unschooled and unqualified, society holds out quite different expectations. They must contend with the instability of the unskilled job market and with increasing unemployment. The jobs they can get are most repetitive, uninteresting, physically exhausting, and often dangerous. They are jobs which rarely provide opportunities for acquiring skills, for promotion, or for responsibility. They encourage mobility but not for better things: mobility for these people is lateral, from one dead-end job to another. Their jobs will be low paid, reflecting the worth society places on unskilled labour. They will lack their fair share of money, status, and influence. In our hierarchical society they will be its least powerful members.

I believe that schools must fight for children to have the dignity of competence in literacy, numeracy, oral and written expression and social knowledge. The art of the teacher is to convey that competence and stop children and young people, for whatever reason, including inadequacy of insight in the home, from missing out.

I would like to make comments on what seem to me to be three sources of distortion of view about education prevalent at present. The first is the false view that the increase in unemployment from 1.5 per cent of the work force to 7 per cent of the work force over recent years is somehow or other to be attributed to some failure in schools. There is a tendency to assert that it all indicates a need for greater emphasis on technical and vocational education. Australia may very well need that greater emphasis on the technical, but it should be remembered that technical vocations have gone down before computers and automation in the current unemployment. A girl who left school three years ago, using a computer, can now set up an entire daily newspaper, doing the work formerly done by 15 compositors. Printing

was a highly skilled and highly respected trade. The technically educated are not *ipso facto* immune from unemployment. Nobody said it was because of any virtue in our schools that we had full employment some years ago; neither is it because of a vice in our schools that we do not have full employment today.

My second point is that when Governments — no doubt for good reasons — decide that they must cut deficits and balance budgets, and therefore cut educational expenditure, they should be seen as making purely financial decisions, and not decisions arising from some study leading to the conclusion that education is lacking in value. A tendency exists to rationalize this expenditure-cutting as if something had been found wrong with education. It has nothing whatever to do with any analysis of the worth of education, and it is bluff to suggest it has.

My third point does not relate to actions of Governments, but to a supposedly intellectual criticism of education. According to this view, there is a so-called "hidden curriculum" of middle-class values which really restricts and invalidates the process of education, and excludes many young people. Some teachers are bluffed by this.

My answer is that, if you give any child and young person — Aboriginal, migrant, disadvantaged, battered in the home, or normally well off — the capacity to read, write, calculate and express itself clearly in speech and writing, you take a major step towards ensuring that that person will never be socially powerless. Illiteracy is a sure route to social powerlessness.

There are no middle-class physics, bourgeois mathematics, upper-class literacy or aristocratic powers of expression. There is the development of personal competence through education, and the teacher's task is to maximize the development of such competence for every child, and not to lose confidence in the worth of what is being done in the face of the latest trendy slogan.

Education has everything to do with competence, and a great deal to do with dignity, and is a vital part of the ending of under-privilege through social advance.

THE MAIN THEMES

1. **The Changing World of Work**
2. **The Individual and the World of Work**
3. **Education and the World of Work**

THE CHANGING WORLD OF WORK

1. REIMUT JOCHIMSEN

With particular reference to the German experience, I should like to talk about the changing world of work and its relevance for education and training in industrialized countries and, vice versa, the impact of education and training on the changing world of work. I shall concentrate on the common aspects of the interfaces between the education and the employment systems in general and also on how the transition from education to a working life for our young men and women as a joint responsibility of employers and trade unions on the one hand and the educational service on the other.

But at the outset let me make clear my values and my standpoint in this field. I am firmly committed to the principle that education is concerned with the development of the individual as a human and as a member of society, for which preparation for a useful and self-fulfilling function in the world of work is merely one aspect. Other aspects of equal importance for the individual, not to mention society, are developing an understanding of complex issues to use the franchise, participating in and contributing to the cultural life, and, of course, developing his own personality.

I am firmly committed towards providing access to all stages of the educational system for all individuals, independent of their social and economic status.

I also state at the outset that I am firmly committed to the principle that in education, as in the economy and in production, policy and planning must not curb the individual's freedom of choice in decision-making, but rather serve it.

I cannot at this time discuss the inherent difficulties for education which lie in the fact that the division of labour in our present-day industrialized society is what those of us who are sociologists call 'the alienation of man from his work', and that an increasing number of people try to escape the world of work by resorting to alternative lifestyles. This to my mind indicates more the need for a change in living and working conditions rather than representing sensible, viable alternatives to the larger parts of our population.

I intend to sketch out some structures and trends in the world of work in industrialized western countries. It is essential for education to be open to society, if only in the long-term perspective of social evolution and development, but it must be built on planned and balanced interfaces between education and employment. I am thus interested in the potential for an active education policy rather than a reactive, defensive effort which tries to hold a line wherever it has been fixed. Education, employment, production and technology are *sub*-systems of *the* social system which is to serve human needs and which should be shaped accordingly. It is no use falling from one extreme to the other — from the optimism which characterized our discussions in the 1960s and early 1970s to the pessimism which seems to prevail now. I think there is a clear case for co-ordination rather than subordination in the interfaces between education and unemployment.

Let us first look at the present structures and trends of employment, and I will just single out a few characteristics. It will not be possible, naturally, to analyze or even to sketch out the main structures and trends of employment in society, based on demographic patterns and fluctuations, the present characteristics of job availability and work opportunity in general, or on age, sex, socio-economic group, and region. Rather I shall concentrate on an analysis of the role of work by rough categories of qualifications which education can or cannot provide and which are in demand in the working life. This can be done by reference to highly aggregated indicators.

Here reference must be made to the framework which forecasters for a long time have been setting up. Eminent economists like Colin Clark, Jean Fourastié, Herman Kahn, Daniel Bell and others have agreed that an increased and intensified division of labour in industrial countries — and indeed everywhere else — will continuously lead in terms of employment to a shrinking primary sector, a stagnating and later shrinking secondary sector, and an expanding tertiary sector of services. Their projections, by and large, have been fairly accurate over the decades, though there is no overlooking the fact that, as far as forecasting technological development is concerned, they were less successful than they were in predicting shifts in the demand for services with increasing standards of living. The most spectacular deviation from the 'classical' forecasts, of course, concerns the new potential for the increase in labour productivity in the services made possible by the computerization of clerical work which is actually presenting quite a threat to our future employment potential. I venture to say that these recent developments in technological advance that have been applied in our society, together with the economic difficulties and crises of the 1970s, have led to present-day gloomy scenarios, like that presented by the McCracken Report done within OECD. These take for granted that full employment will not be reached again in the near future, and that we shall have to suffer from chronic unemployment for the next 10 to 15 years.

I find this to be an unacceptable perspective; there is no need to capitulate in front of these gloomy forecasts. Another report produced within OECD in 1977 on all education policies and trends in the context of social and economic development perspectives states, 'It is clear that education cannot be expected to adapt to economic cycles and, more particularly, that its long-term development cannot be planned for a perspective other than one of full employment'.

This report goes on to say, 'No valid projections exist as to the precise nature and pattern of the future development of the economies, which could serve as a guide for the long-term planning of education'. We are definitely not embarking on a system of manpower planning for which education has to provide the coins to be put in prefixed slots.

The relationship between employment and qualifications may be characterized with reference to some theses which are more complicated than one of subordination of education under employment:

(1) The level of qualifications needed in the production process of modern developing economies will continue to rise, as it has risen for more than a century in all comparable and competing societies. With reference to

Germany, let me recapitulate that before the First World War, only one-quarter of an age cohort of young men and women received any vocational education or training above and beyond compulsory schooling, and only one-quarter of them gained what you might call a certificate or some kind of structure qualification that could actually be used in the labour market. Before the Second World War this figure had risen to about 50 per cent. As we now stand in West Germany, some 90 per cent of beginners actually receive structured vocational education and training over and above their compulsory schooling. Nevertheless, since the untrained still make up the greatest part of the unemployed in every recession, it can be concluded that any reduction of those without vocational education or training also fits labour market requirements. We have a German context that 70 per cent of the unemployed are those who have not received any structured vocational education or training.

This thesis of qualifying all youth by means of structured vocational education and training is in contrast to the apparent polarization of qualifications needed in work — a situation brought about by Taylorism, Fordism, and other mechanisms of dequalifying work conditions, which no doubt occur in certain branches of the manufacturing industry. Sometimes it appears to be a necessary, unavoidable transitional phase in the process of industrialization and modernization.

I might add, of course, that it is the sorrowful truth that such developments did take place in the United States, particularly in the years before the First World War, and in Germany in the 1960s and the first half of the 1970s. However, the question is, what is the cause here and what is the effect? I venture to say — and I have outlined this in my paper — that here it is more the question of what manpower is available for employment in the labour market rather than developments in the technological requirements of modern industrialization. This can be shown with reference to the important change in the composition of migrants to the United States at the turn of the century, when the influx of migrants from central and western Europe came to an end. There was a shift from industrially trained, usually skilled people to less well adjusted and less well trained migrants from rural areas or cities in eastern and southern Europe. In Germany we could see a similar thing happening after the Berlin Wall was built in 1961, excluding from one day to another the further influx of East Germans to the West. It had been decided to accept increasing numbers of foreign workers into Germany, but there were fewer coming from countries like Italy and more from countries like Turkey, Yugoslavia and Spain, which means they were generally less well prepared. The question is whether this trend is something that will be with us for a long time to come or whether it is a transitory phase; whether we accept it as a development or whether we try to influence it.

(2) Structural change and technological advance do not generally happen discontinuously in spectacular bursts whereby in short time-spans of a year or so workers are dismissed in great numbers, transferred or dequalified—what I would like to call the 'hard change'. Rather technical changes on the work-place and the structural change of demand happen in very

small steps — creeping, almost furtively — having only an insignificant effect on any particular work-place and affecting only a small percentage of work-places. This is the so-called 'soft change', and is much more important because it is steady and all-pervasive. These continuous changes of course may amount over a decade or even over a whole generation and a whole worklife to considerable upheavals. I can state here the paradox that our perception of these changes happens by thrust, but the underlying alterations themselves occur steadily and in small steps.

(3) Thus the trend towards the 'services society' is continuously pressing. Current recessions and apparent countermoves, notwithstanding the composition of the workforce, are moving in that direction and in most countries so are the structures of production. The share of work which is not directly related to manufacturing production — white collar jobs, tertiary sectors of the economy, highly qualified work presupposing higher educational qualifications — all these have steadily risen.

(4) Today, science-based information industries account for more than one-half of the United States gross national product, and over one-half of all the jobs in the U.S. economy. Furthermore, it has been estimated that advancement of knowledge is the largest single source of long-term economic growth, accounting for more than one-third of the total U.S. economic output since the Second World War.

While the information explosion has expanded our understanding of the world around us and has, to date, brought us a high standard of living and economic prosperity, continued benefits will be directly related towards our society's capacity to absorb new information and our ability to use it. This rests not only upon science's ability to learn and to apply knowledge in a productive way but also on the ways and means in which this outer frontier of knowledge, which has been extended over the years, will be transformed into advances of the inner frontier of knowledge — that is, the way our teaching professions actually bring it across in a manner which a young man or woman will be able to digest, accept, and actually learn these important elements.

I quote from a paper by a staff member of the U.S. National Academy of Science, 'If we are to continue to reap the rewards of discovery, we must exert as much energy and resources on the inner frontiers of knowledge as we now devote to the outer frontiers . . . We must create new techniques and new technologies to significantly augment the human skills that are necessary to convert data into information and to transform information into knowledge. We must devise new ways to expand human capacity and reasoning'. I want to back this argument by just referring to this example: the biomedical literature produced in one year will take one scientist 22 centuries to read and to digest! Of course, it has been said for a long time that science doubles its body of knowledge every ten years. As we cannot possibly extend the duration of educational periods by that sum every few years, we have to create what one would call new instructional paradigms that will permit us to utilize the various teachers and the electronics media, and devise ways and means of more efficient teaching. And these should be available for what

you may call 'little science' as well as 'big science', for small industry as well as big industry.

Having outlined this ever-increasing role of knowledge and of technology, I should warn against a simplification that is very often spread by those who analyse technological developments. Daniel Bell postulates that knowledge and technology are the two characteristics of modern development, and are the sources — I should add the only sources — of innovation. Bell says that a small functional élite has now emerged in the shaping of the 'new class structure of post-industrial society' — an élite which has to determine the course of sociable development.

I contend, however, that neither knowledge nor technology are autonomous, isolated phenomena, just happening because they occurred to the human creativity. They are also products of society in a sense that there are options open — avenues from which to choose — which call for a new, integrated, long-term approach to tackling and solving problems of the education system and the employment system based on the same understandings of the workings and mechanisms of Western industrial society. The importance of science, including, in my understanding, the humanities as well as the social sciences, can hardly be overstated. Today the body of theory is not formed following social reality or parallel to it, but, on the contrary, very largely science and its evolution are partly preceding, if not determining, or at least influencing reality.

Thus there exists a kind of 'science-education-training-innovation system', the functioning of which is vital to our societies, though there is no predictable causal relationship involved in the sense that more input into science will definitely produce a certain output, particularly on the side of transferring qualifications. The procedures of verification or falsification here are more difficult than in science proper. But I venture to say that research and development in the outer as well as the inner frontiers of knowledge in order to increase our ability to transfer knowledge, to make it applicable and to gear it to the needs of human society call for an educational policy as well as a policy of technology promotion, including a policy for the improvement of working conditions.

Now, all these elements do not necessarily call for State action and State activity in all their spheres, but they do call for a conscientious effort on the part of society and the various groups and persons involved in their development. My conclusion is that it is not enough to develop science, knowledge and technology and to concentrate on the developing of the skills and qualifications of the top 10 or 20 per cent in manpower. There is a need to actually spread knowledge and qualifications to each and everyone — not only because of the goals and aspirations of education but also because of the needs of employment and the needs of the further social and human development of our industrial societies. I would like to issue a warning — and this may stem from Bell's analysis — that we are in danger of programming a polarized society built on this huge distribution of knowledge in our societies, and setting up what you might call a small group of academics and pundits, scientists and modern technologists on the one side, and a growing group of what you might call helots or slaves on the other.

I think we are at the crossroads in this respect — crossroads that concern many mechanisms working in our societies.

Turning to the nature of technological advance and its relevance to the world of work, there is quite an extensive but what I would consider a wrong analysis of the nature of this technological advance as it is largely understood. To sum it up, I am not at all convinced that technological knowledge is a definitely determinable body of statements and laws from which you can draw but one conclusion with respect to the number and the kinds of jobs necessary in the employment system.

Rather I venture to present a counter-concept which is building on the interdynamic interaction of the sub-systems of education and employment. I am in this sense treating work and technology as elastic potentials, the creative utilization of which can enable the enterprises to preserve their existence under constantly changing economic and social framework conditions. It is up to the individual enterprise and up to the individual managers and workers to influence the course of action they actually take in trying to solve their problems. Because of their growing capacity of qualified manpower and of the relevant abundance of capital as factors of production, it is very much of importance in the longer term to step up the rate of innovation as well as the qualifications of the workers. It is clear that the realm of the firm for actively shaping actual technological progress and utilizing manpower is dependent on the type and programme of both the qualifications policy and the labour market policy which the government and the social groups follow. The firms do not simply exist in isolation; they depend on what kind of manpower procurements they can arrange for or have to accept for their own activities.

This interdependency between the world of work, technology and qualification, I think, can best be exemplified in the diverse avenues open to our society by reference to the study done for the European Commission in Brussels. It clearly shows that there is a close link between the system of qualification and training on the one hand, and the organizational structure of the labour force and the production process itself on the other. To my mind this presents a key to understanding something about long-term alternative options available in this field.

The study looked at firms of identical size in France and Germany, and at identical products produced by identical production techniques. The question was then asked as to how much qualified manpower or what qualifications were being utilized, in either country. From the point of view of the engineering thesis of technological advance, it would, of course, have been obvious there was only *one* answer — the same kind of manpower input would have been used in both countries, because of the definiteness of the technological production function. The outcome was most striking, however. The authors found that there were distinct differences with regard to the qualifications structure of personnel, to income distribution and to the organizational hierarchies in the two countries. In France, where the workforce, by and large, had had more years of general education, hierarchies were more marked and showed there was more specialization of work input in production, and much larger staffs of non-producing employees engaged

in both planning and control, which in turn were more refined and segregated. In Germany, by contrast, the production process showed more dependence on the flexible and multiple use of skilled workers, including functions and management control and participation by those skilled workers. This leads to greater equality and income distribution — specifically to comparatively higher level incomes for the lower strata of the labour force. Thus the diverse interactions between the education, employment and income systems have in the French and the German plants and enterprises with identical products, technology and size brought about strikingly different results.

I cannot possibly confront you with all the details of this important study. Nevertheless, to my mind, it is of utmost importance to understand that French management had to adjust to the type of qualifications policy that was emerging at the end of the nineteenth century — a policy which had broken down vocational training, concentrated on general education and emphasized strongly formal general qualifications. On the other hand, in my country vocational training along the apprenticeship scheme lines was able to survive and presented the opportunity for firm management to rely heavily on flexible, versatile, skilled work which could be used in many different ways. The interesting thing is, of course, that when you think in terms of further education, continuous education, and motivation of the worker, these are factors which mutually reinforce one another. If you are trusted by being given room for your own development, for your own contribution of adjustment and innovation, you tend to be more motivated to learn, to continue to learn, to adjust and to contribute to innovation. Those who in hierarchical structures are excluded from actually having responsibility, of course, have no motivation to go very deeply into the potential of their work. An absolutely essential element in this development, of course, that has proved itself is workers' participation in company policy determination. Also union policy as well as social policy at large has concentrated on more humane working conditions and greater social stability and against a general resistance to technological advance.

In this sense I do not accept the notion that there is a pyramid of job availability existing in the long run in our society. Clearly, at any one given moment, it is true that the job availabilities are of a definite structure, and so are the qualifications available. But the question is, what course of action do we take or do we have to take for granted in the longer run? The pyramid shape, where you have a small but very able top and enlarging and downgraded lower strata without any skills whatsoever, should not be in our minds when we speak of qualifying manpower for the future needs of our society. Rather we should think of it as something like a pear or even an egg, in the sense that we should concentrate on increasing as much as possible the top qualifications as well as the middle qualifications, but not leaving out any level to get its qualification. Between the French and the German situation, taking identical firm sizes, identical production programmes and production techniques, such differences could actually come to exist.

I think it is worth while to look into the way in which in Germany the transition from education to work is actually organized. In 'nice internationalese', this is called 'insertion into the world of work' of young people. In the German context this means State and industry. Employers as well

as unions consider it a social responsibility that every boy and girl should obtain an acknowledged vocational or professional qualification. Post-compulsory, full-time schooling now makes up for about 20 per cent of an age cohort leading to a full vocational educational qualification or — and this still goes for about 50 per cent of our youth — through a three years' apprenticeship scheme. I should add that this apprenticeship scheme is no longer a copy of what it used to be in the dark middle ages, but reflects the fact that we have undergone, since 1890, some very important changes. The new sectors of industry — that is, big industry as well as banking and the department stores — have picked up the apprenticeship scheme as the in-service method of training young people. Of course, there is a need within this apprenticeship scheme for modernization in the sense that you should not train for narrowly defining skills, but should rather emphasize flexibility, versatility and the transfer of general skills that are essential for success on the labour market. In this sense I have no hesitation whatsoever in including in the training programme of the apprenticeship schemes the transfer of those so-called life skills and social competencies that are important for our industrial way of organizing work. We know that the decision as to where a young man or a young girl goes is a complex one, and is usually taken at the age of about 15 or 16. In our policy it is most important that all those who want to continue in upper secondary to gain a general education can do so and should do so. This same problem of organizing the transition from education to work life holds true for the higher education sector as well, because it is here where exactly identical problems come up.

I will now turn my attention to the apprenticeship scheme, particularly for those of the age group 15-19, although most of the principles I propound apply equally to the higher education sector. We know that many young boys and girls after having been through eight or nine years of school feel bored and tend to become drop-outs. They want to do something and I think it is the joint responsibility of the employment system and the education system to make this experience available to them. To this end the apprenticeship scheme is concentrating less on learning in a theoretical sense by making use of feed-back from what is actually experienced on the job. This to my mind is so crucial because a general extension of the schooling period, in our experience, may solve the problem for those who are better qualified and those who are more interested, particularly in theoretical issues, but it may alienate all the others, even actually leading them astray. We know the age of 15-16 is a very crucial one and we also know from experience as well as from the statistics that those young boys and girls who neither get a job nor receive vocational training at the age of 17 or 18 are very unlikely to return to either schooling or to learning a trade, or to any learning whatsoever. We know that it is the initial level of education and qualification which determines the interest and motivation with respect to further and continuing education.

Of course, in the 1970s, Germany has experienced the same difficulty that other countries have — the world economic crisis coincided with a demographic upward turn resulting in larger groups of people wanting training and seeking jobs. It came too at a time when economic difficulties were at their worst and we had to face the decision of what to do. We decided that we wanted to continue to maintain, if possible, the 50 per cent mark in the age

cohort in the apprenticeship scheme. In other words, we did not feel that it would be fair to distribute the chances too unevenly among the various age cohorts. Of course, in an economic depression, the number of apprenticeship places offered does not normally increase but rather tends to go down. We were then at a stage in the German society where great insecurity and uncertainty prevailed. Politically, we had to trigger off a public debate, which took some two years to get through, as to what our attitude was towards this young generation. Should we educate them to become the unemployed-to-be, and thus accept that they might go without a formal school certificate and without some set of structure qualifications for labour-market skills? The decision was made in my country, that we should make every possible effort to provide every boy and girl with a vocational qualification, which would take them about three years beyond the compulsory schooling period, and would lead to some kind of marketable skill which they could use to find themselves a job. Accordingly, Federal Parliament in 1976 passed the 'bill to secure adequate provision of training places'. The outcome of the controversial political debate was a kind of fleet-in-being solution. The Bill states that if in any one given year the number of apprenticeship vacancies does not exceed the national scale of demand for an apprenticeship over the whole range of about 460 acknowledged vocations by at least 12.5 per cent, leaving a degree of marginal freedom open to those demanding a vocation to decide where to go, then a levy should be exacted from all larger firms to a certain percentage of their annual gross wages. Firms of small and medium size — up to about 20 employees — were to be exempted from the levy. The money was to be used to create or stimulate new training places and to give a premium to those who had increased their efforts already.

Understandably, the employers did not exactly like this scheme. They saw it as the Trojan horse of State interference. What matters is, of course, the way in which they expressed their disapproval: this they did by accepting the principle that by training apprentices they were fulfilling their responsibility towards the young generation, and therefore also accepting the principle that the training effort should not be limited to what they estimated to be the future need in any given craft or trade but solely by the demand of the young to have a chance for educational qualifications. They pledged every effort to revert the trend of a further decline in the number of training places towards increasing these training places. Of course, by this they also wanted to show that the political establishment of the nation-wide standard and levy-system was superfluous but they still actually had to meet these. I must add that, early in 1975, the German employers' associations offered the Chancellor a net increase of 40,000 vocational training places if the Federal Government would forgo legislation. As of today, we have on an annual basis more than 150,000 additional vocational places offered and taken up. We used to have about 450,000 apprenticeship contracts concluded every year but we are now well beyond the 600,000 mark. This means that, at a time when the unemployment rate was almost unchanged at about one million and the number of jobs in the over-all scene decreased rather than increased, we were effecting an anticyclical action resulting in an increase of one-third in the 1978 contracts over those of 1975. This year (1979) will actually be the peak year in

demand. It has been estimated that the demand will rise well beyond 650,000 places and we hope to meet these. We do not know exactly how many will come, because not only do some have to decide between continuing in general education and attending full-time vocational school but also those who have finished and graduated from grammar school to the end of upper secondary and who now want to enter into the apprenticeship scheme are coming in ever greater numbers.

In talking about principles, we try, of course, to exclude wherever possible, under this emerging qualification policy, short-term and improvised short-lived gap measures. We carefully try to avoid mere retention schemes or 'parking devices' for young people, which merely postpone the problems and increase their vulnerability. We would rather save the money for structurally meaningful measures in the longer term to aid the private sector as well as the public sector by putting up these additional apprenticeship places. We introduced, for instance, a crash programme of investments of more than one billion Deutschmarks into inter-firm training facilities to help small and medium size firms and handicrafts to keep up their functioning in the apprenticeship scheme, to modernize the apprenticeship scheme. Where small and medium size firms tend to become more and more specialized, and are thus no longer in a position to teach the skills in the broad sense of the word, the inter-firm training facilities are designed to make up for this. (More than 40,000 places were thus created in all parts of the country for many trades, offering to a much larger number of trainees shorter or longer term courses of instruction.) We started programmes for training the trainers, providing them first of all with the kind of self-consciousness and the understanding of the role they have to play as educators in the employment system. We have in Germany more than 350,000 acknowledged trainers in this sense in the primary and public employment sector. I could speak much longer about modernizing the curriculum of the apprenticeship scheme, but much of that is included in my paper. Of course, there is no denying the fact that we still do have quite a lot of problems — problems of determining the vocations, the demarcations, developing the curriculum and devising the best teaching methods.

I think it has been shown that the start of a relationship of active interaction between the two sectors is neither self-ordinating education to the so-called needs of the employment system, nor for the employment system to accept whatever the education system puts out. This calls for a new demarcation and definition of what the educational function is to be in our modern society. I think there is a need to define, as OECD puts it, the contents of basic education up to the end of compulsory education. This to my mind should include not vocational training but first vocational orientation and some knowledge about common economic and social affairs. The time period of compulsory education should not include vocational training or education, which is something to be left beyond compulsory schooling. It is of vital importance to have a smooth transition into such joint schemes of learning in school and in work.

It is interesting to note that in the critical debate on youth unemployment, its structural origins and remedies, there has emerged, I venture to say, something of what you might call the European outlook in the approach

to an educational policy in relation to vocational education. I call this a European approach, because in our societies the same way of thinking is true with respect to technological advance, and its repercussions in the critical discussion on youth unemployment.

This outlook is based on the philosophy that social and political responsibility for youth goes beyond the procession — and indeed enforcement through compulsory school legislation — of a solid basic education and includes organized schemes for entry into the world of work, preferably with an acknowledged vocational or professional qualification. An offer should be made to each and every one in the age cohort, including, of course, the most vulnerable groups — an offer not in place of more formal education, but particularly for those who are not motivated to go on with schooling.

Dominant in our societies now is the strong desire to help young people, particularly girls, to find training offers, and also to help groups of young people with special difficulties, such as the handicapped and the children of migrant workers. To reach the same level of qualification some need a rather longer than shorter training and require more assistance. There is a defined and accepted joint social responsibility on the part of the State, the employers and the trade unions to provide this offer so that youth unemployment will not be the normal in the life of the rising generation. It is obvious that, in the German context in history and at the present, there is also a strong political motivation which unites the parties and social groups: the desperate attempt to fight political extremism, which often has its origins in youth unrest.

I still have one problem to refer to — a problem that is very much in the forefront of my mind. An important German trade union leader once said, 'General education is the vocational training of the leaders in society. Vocational training is the general education of those who are led'. I dare say that this still very much determines the real value credited to training education for work-life. I add that this is one of the most important problems educators have to solve, and I think they should do so by being creative in the use of terminology. In the Anglo-Saxon countries the dichotomy between general education and vocational training has not happened by chance, but by a clear-cut social design when it was set up. I dare say that general education, in terms of what its content used to be in the nineteenth century, does not suffice any longer, neither in compulsory schooling nor thereafter. We are living in a science-based civilization; we need to digest much more information and understanding than has been the case. I would like to add to this — educators should be called upon to re-define what basic education in compulsory contact actually does mean, and what kind of education is to be provided in the upper secondary and higher education. I think there is a strong case to be made for this joining of principles with respect to theoretical training and school-type institutions. Practical learning while actively engaged in a workshop-type situation is a principle which has to receive much wider validity, and is called for today in a much stronger sense than was the case when we were simply training in general education a small élite who were born to be the leaders in society. I think there is a need today to organize

the upper secondary and higher education on a similar principle. I am not at all sure that there is a simple recipe available that you can spread over the whole sector, to set up a new kind of comprehensive education based on patterned organizational forms and solutions. I think the changed role of science and technology does call for a new attempt in our industrial democracies for an effort to strengthen the role of a well-functioning 'science-education-training-innovation system' which exploits the dynamic interactions between education and employment in systems re-defining their functions within the context of human and social development and of the individual in our industrial democracies. Decisions are needed. The longer term perspectives are bright if the joint responsibility of the State and the social groups, including the employers and the trade unions, is accepted and enforced.

2. Mary G. Gaudron

Paid employment, hitherto the norm in Australian society, continues to be the aspiration and expectation of most Australians, both male and female. One of the most significant social changes within the past quarter century has undoubtedly been the greatly increased participation of females in the paid labour force to the point where women now constitute somewhat in excess of one-third of the labour force, and of those women, approximately two-thirds are married. The recognition of women as an identifiably significant section of the work force having particular industrial needs and interests has been a slow process, and a process which is not yet completed. The pressures and arguments which have led to such recognition manifest in the introduction of, *inter alia*, equal pay, maternity leave, and anti-discrimination legislation, and which continue in support of paid maternity leave, child care and other facilities, suggest that the past twenty-five years have witnessed a fundamental change in the nature of Australian society and the Australian work force to the point where almost all Australian women expect to spend a significant part of their adult life in paid employment, and most Australian families will for significant periods be two income families.

This change in some respects preceded, and in other respects accompanies, a situation in which job opportunities have failed to keep pace with the numbers of available workers. The increasing availability of new and sophisticated technology at costs more than competitive with labour costs would suggest that this trend will continue.

Paid employment as the norm in Australian society has been not only the major source of income for Australian families, but has also in many respects been an important determinant of their life-styles. It influences, not only by income-level attaching to the work performed but also by the status perceived to attach to the position, the social standing of the individual concerned. Geographic proximity to available or existing employment frequently determines the locality in which families or individuals live. This fact in combination with others such as urban and satellite city development and the decreasing significance of church and other community organizations frequently means that social activity tends to centre around contacts made

at the work place. Moreover, an individual's self esteem is frequently directly related to the availability of satisfying work.

Although other factors have certainly been relevant to the failure of job opportunities to keep pace with available labour supply, easily the most visible and readily identifiable factor has been the introduction of new technology into areas of industry which were previously labour intensive.

Where such introduction has been accompanied by retrenching programmes, the trade union response has generally and understandably been one of non-constructive total opposition. I say understandably, for from an industrial viewpoint, such technology is frequently like the curate's egg — good in parts; but the organizational structure of trade unionism in Australia often makes it impossible for the trade union directly concerned to take advantage of, let alone exploit, the good parts. Let me illustrate with a hypothetical yet highly probable illustration. Assume a continuous manufacturing process, the end point of which requires cutting to size, packaging, storing, and the filling of orders previously received, all of which functions are performed manually. Such functions would in all probability in any manufacturing establishment in Australia be performed by a number of employees — members of the Storemen and Packers' Union. The manufacturing process on the other hand may well have involved a larger number of employees, members of a different union, or even several different unions having overlapping constitutional coverage of the production employees concerned. Apart from the Storemen and Packers' Union and the production union or unions concerned, there will be several maintenance employees — fitters and turners, electricians, greasers, etc., whose function is to maintain and repair and possibly even install equipment required in the manufacturing process. These maintenance employees will be members of at least two other unions and possibly more. Into this fairly typical if bewilderingly diverse situation of trade union representation, the employer may decide to introduce computerized equipment that, with the direction of a single employee, will perform all the functions of cutting, packaging, storing and order-filling previously performed by members of the Storemen and Packers' Union. Such an introduction will typically lead to the retrenchment of twenty to thirty employees, members of that union. In all probability the Storemen and Packers will then place a ban on the operation of the new equipment or go on strike. The production union or unions will have no interest in the matter for the members of that union or those unions will in no way be affected by the new equipment, and they will continue normal work until such time as there is no storage space, when they will probably be stood down without pay. The maintenance unions will similarly not be adversely affected — although over time they may well be the beneficiaries of the good parts of the curate's egg in that conceivably the number of employees who will maintain the equipment may have to be increased, the employees concerned may have to undertake additional training and may ultimately receive a higher salary level and increased promotional opportunities. However, because they are not immediately and directly affected, they will in all probability not be immediately concerned to ensure that the potential for their section of the work force is realized. Failure to involve themselves then, or even earlier, may well result in maintenance programmes being

contracted to the overseas supplier of the equipment, and many of the potential benefits to that section of the work force being totally lost. Meanwhile the Storemen and Packers will have no real alternative but to settle the dispute on the basis that the surplus employees receive redundancy pay, and the remaining employee receives a higher salary level for the added responsibility of supervising the new equipment.

Only in rare instances so far in Australia has management seen fit to inform trade union officials and employees in advance of the purchase and installation of new technology. Even rarer have been the instances in which employees have been afforded the opportunity to involve themselves in decisions relating to the technology to be introduced and for the adaption of work practices and numbers employed to that technology. Even when employees have gained information in advance of the introduction of new technology, their requests for involvement in the decision-making processes have been met with the response either of managerial prerogative or of higher engineering and/or technological knowledge. This too has contributed to the suspicion and opposition of trade unions and trade unionists to the introduction of new technology.

This failure to consult and involve workers in the decision-making process not only ensures that the introduction of technology will be accompanied by industrial unrest, even if it is not manifest by stoppages and bans, but also poses the real possibility that the technology will not be optimally adapted either to the needs and skills of the work force or to the industrial processes of the enterprise concerned. The propensity of management in Australia to ignore the wealth of expertise and skill of its work force in decisions to introduce or implement change betokens an arrogance which assumes the meanest of intelligence, education and co-operative enterprise on the part of labour. All too often this same assumption attends the processes whereby decisions as to the technology to be purchased are made. Where options exist between technologies and processes involving a creative and thoughtful input on the part of operators and others which involve only mechanistic and routine functions, almost invariably the latter will be chosen. Similarly, where as is often the case, the technology or process is capable of being operated at several levels, management will frequently opt for operation at a level that involves the least intellectual involvement on the part of operators concerned. It would be unfair to place the responsibility for such decisions totally on the inflexibility of Australian management. Influential factors which contribute to this process are the narrow and often artificial distinctions that have been made through the judicial and arbitral processes as to the rights of particular trade unions to enrol particular categories of employees. If additional or different functions involve a change in the category of employment, then demarcation disputes attended by lengthy and expensive legal argument are rendered probable. Similarly the arbitral systems have during their mere eighty years of existence shown a predilection for classification of jobs more befitting a librarian than an industrial tribunal. Thus in the Meat Industry Interim Award, 1965, there are a bewildering 90 different classifications with wage rates differing by a mere $23.60 between the highest and lowest classification. The notion that every employee must be fitted within a pre-ordained job slot also militates

against a flexible work force able to perform at anything other than a routine level.

The tendency to pattern work processes and to purchase technology which requires work performances at a routine level has several worrying implications. Most noticeably it engenders boredom and job dissatisfaction, which are likely in turn to have an adverse effect on personality integration, creating further family problems that often become social problems. These problems are often most acute at the level of the skilled operative or tradesman who has invested considerable time in the acquisition of knowledge and experience and the perfection of a skill or trade that is no longer required to be performed in a variety of manifestations, but is often restricted to a mere oversighting of machinery and equipment. Frequently such employees are not only bored and dissatisfied but are also frustrated by their failure to understand the new technology, and by the failure of management to instruct them adequately in the new techniques and theories.

Not all new technology has been accompanied by de-skilling or downgrading of work functions. There are instances within this country where new technology has been introduced in such manner as to ensure the further training and education of operatives, with opportunities for progress into higher areas of work performance and for the exercise of responsibility skill and judgement at a high and satisfying level. Theoretically it should be possible for similar consequences to attend all such innovations, but because in Australia the practice diverges very substantially from the theory, I should like to mention one particular industry where the introduction, adaption and exploitation of new technologies has had the positive effect of providing its work force with further educational opportunities and facilities, and with the opportunity to work at an intellectually satisfying and responsible level. I refer to the aircraft industry. In that industry new technologies were introduced gradually, with employees being afforded the opportunity of training in the technology, of progressing through the award classification structure into newer and higher classifications and, most significantly, of themselves contributing an input to the utilization and adaption of the technology to the needs of the industry. Notwithstanding this particularly enlightened industrial gradualism, it is worth noting that the technology permitted aircraft maintenance to change from routine maintenance predetermined in accordance either with real time or flying time elapsed, to on-condition maintenance effected only on operational failure, without the work force being informed of this radical change.

From an industrial perspective, one harbours the suspicion that the full potentials of new technologies are not being maximized to the benefit of either industry generally or to the Australian work force as a consequence of the inflexibility of management, which inflexibility may well be in part protective coloration for management's own failure to understand the technologies purchased, and the over-rigid distinctions in union organization and structure which impede proper exploitation. Unless these problems are overcome either at an institutional or organizational level, it may well be that the adverse consequences of new technology will outweigh the good.

Certain industrial consequences of labour substitute new technologies are already obvious. Others may well be in train. It has already become manifest that industrial disputation will occur and will continue to occur with respect to redundancy caused by the introduction of new technology. It has also become clear that technology has allowed industrial disputation to proceed on the basis of selective bans by key operators without resort to the more traditional strike action. The continued introduction of new and more sophisticated equipment will undoubtedly result in the concentration of greater industrial power in fewer individuals performing key functions. The degree to which this potential to cause industrial dislocation will be translated into effect will depend on many factors, of which two at least should not be overlooked, viz. boredom and job dissatisfaction. Such factors when present in the labour force contribute mightily not only to absenteeism but also to the frequency of industrial disputation.

New technology has the potential to contribute to substantial power-shifts both within individual trade unions and between trade unions, both in terms of absolute numbers and in terms of functions performed. Although it is not possible to predict the consequences of such shifts in power, it is worth noting that such shifts may well contribute to industrial disputation.

Notwithstanding the potential for industrial problems inherent in the introduction of new technology, gradual and humanist application and adaption of such technology should provide, as in the case of the aircraft industry, opportunities for further education and promotion, as well as contribute to the elimination of some routine, non-satisfying jobs and some physically arduous work. If that can be achieved without simultaneous reduction in job opportunity, then technology will have much to offer.

REACTION

R. I. VINER

When we look at the two papers that have been delivered here today, I think they have both struck home on two questions that are facing Australia — technological change, with its impact on people, on industry, and on the structure of society; and the relationship between education and work. This latter question is, I find, reaching a very high point of public discussion in Australia. Perhaps I am noticing this because, having been thrust into the responsibility of Minister for Employment and Youth Affairs, I am having to face up to this question in a much more dramatic way than previously. Nevertheless, since becoming Minister and moving around Australia, listening and observing, I do feel that this particular question is receiving a great deal more attention than it has received in the past.

But let me turn firstly to Justice Mary Gaudron's paper and immediately say to you that I am not going to buy into the argument as to why there are so many women in the work force and what the causes of this are, for fear of being labelled a seducer as much as anything else. But let me just say that I agree with the observation that the entry of so many women into the work force today has brought about very significant and quite profound changes to the shape of our work force. (How about that? It is very difficult not to choose the wrong words.) When you reflect very quickly on the span of history since the Second World War and think of what the concept of full employment was in 1945-47, with men and women coming back from the war and with the concentration being on providing full employment for the breadwinner, and compare it with the concept of full employment today, I think you can see that we are talking about two different concepts. Full employment today is a different social concept to what it was immediately after the war. Today's concept is one of providing enough opportunities for everyone who wants to work to enter the work force, and there is a changing pattern of the number of women who are in the work force, as well as a changed pattern between full-time employment and part-time employment.

If we come down to technological change, you have the argument, of course, as to whether the technological change is destructive or beneficial — whether technological change itself promotes growth. And here, I think, there is an interesting interaction between what Dr Jochimsen was saying and Justice Gaudron's remarks. I was pleased to see that both of them acknowledged how technical change can have positive benefits, and how necessary technical change is in modern society; and that, if there is a problem about technical change, it is not really how to stop it or how to prevent it, but how best to accommodate technological progress to maximize its benefits.

I recently opened a building for a major international company involved in data processing. The building was the company's Australian

head office. Some of the information that was given to me was, I think, pertinent to what we are talking about today — notably the prediction that by the turn of the century the data-processing industry will be the largest single industry in the world. Now that means a host of things for society, but if we are talking about employment and industrial relations, it is not difficult to envisage the impact on the world of the growth of that single industry.

But let us bring it home to Australia. For one thing, it is going to open up a whole new horizon of employment opportunities, and that, of course, is relevant to you as educators and to me as a government minister. I think Justice Gaudron's paper very clearly brings out one thing that has been evident in Australian industrial relations in recent years — a lack of understanding between management and the unions, and a lack of co-operation between management and the unions when technological change is introduced into industry. We must try harder than we have ever done before to anticipate the impact of the changes that will come about through technology. We must ask ourselves whether the effect of technological change on youth employment and youth unemployment will be more seriously damaging than beneficial. I would rather take the positive view by looking at the kind of things the West German experience shows us, acknowledging that we have a real job on our hands as a government, and urging you as educators to make sure that technological change is beneficial to our young people.

Recent studies in Australia have shown how the lack of qualifications — the lack of educational competence — has put young people at a very serious disadvantage in the employment market in recent years. Here are some statistics:

- For persons leaving school at age 14, in the period 1971-1976 the unemployment rate was 24 per cent, the rate among persons leaving school at 15 was 13.1 per cent, and the unemployment rate amongst all persons leaving school in that period was 10.1 per cent.
- Of the unemployed that left school between 1971 and 1976, some 46 per cent left school at age 14 or 15.
- A survey conducted in August 1978 showed up the poor labour force performance of early school leavers, the overall unemployment rate for the 15-19 year age group being 16 per cent, and that for 15- and 16-year-olds in the labour force 28 per cent and 22 per cent respectively.

There is thus clear evidence of the tendency for the under-educated to have a higher representation amongst the young unemployed. That provides, I think, considerable food for thought in the context of what has been discussed here today. With regard to government action in respect of technological change, you will be aware of the Myer committee set up by the Government to inquire into technological change — the third leg of the trilogy of inquiries which have recently been established, and two of which the Williams committee of inquiry and the Crawford committee of inquiry, have now reported to the Government. By the time we receive the third

report, we should have one of the most comprehensive studies of technological and industrial change — and the demands that are consequently being made on education — that Australia has ever had.

On the industrial relations front itself, we have asked the National Labour Consultative Committee to examine the industrial relations aspects of technological change. Professor Myer's subject is wider than that and so the NLCC has been asked to examine it from an industrial relations point of view. The importance of that is that the Committee is a tripartite body — unions, employers and government — and hopefully, through that kind of examination on a co-operative basis, there will be better understanding in the future and a much higher level of co-operation between management and employees. For the same reason that I refused to buy into the argument about the reason why there are so many women in the work force today, I am not prepared to say where the blame lies — with management or with the unions — for the lack of industrial understanding about the impact of technological change. As I listen to Justice Gaudron speaking about classification, about how you find jobs within awards and how difficult the rigidity of that classification makes industrial relations, it brought to mind an experience I had in industrial law, in which I practised many years ago, principally on behalf of unions. I remember one case in which I acted for a government employees' union. We had to resort to the legal device of prosecuting the employer to try to bring a particular group of workers into a classification when they were otherwise not catered for under the industrial award. It certainly brings home, I think, the rigidity of the system of awards and industrial agreements in Australia. I believe, if I might make this observation, that not only unions and management must be prepared to approach this subject with more flexibility but the heavily institutionalized and rigid arbitration system of Australia, whether it be State or Federal, must also be prepared to be more flexible than it has been in the past.

Let me now turn to Dr Jochimsen's paper, and what he discussed in terms of a qualification policy. I think it is very timely indeed that his paper should have been presented to a college of educators in Australia at the present time, and it certainly is a most valuable contribution to this subject. There has been increasing debate about the relevance of the education which our young people receive at schools, about the transition from school to work, and about the relationship between education and the world of work — debate that has really focused attention on the question of whether education should be for the purpose of providing general education or whether there should be more emphasis on vocational education. Let me dive into the pond and say straight away that I believe our education systems in Australia must pay more attention than they have in the past to vocational education. Unless we do, we are going to be left behind as a nation in an intensely competitive world, and I think if Australia had been better prepared by having a better-qualified work force, we would have found ourselves in a much better position to face recession, and also to take advantage of economic recovery. I think one of the things that really comes home to us in Western Australia, where we have such abundant natural energy and mineral resources that are wanted so desperately by

the rest of the world, is that we will not be able to take full advantage of these resources unless we have a work force that is able to match the technology necessary to harvest them and sell them to the world. I think Western Australia in the next couple of years to come is going to face a pretty desperate situation in trying to find people with the educational competence and the qualifications to provide the skills that our industry is going to require. And not only Western Australia — if you move to the Eastern States, where the great manufacturing base of Australia is, our manufacturing industries are going to face exactly that same situation as they try to expand their exports and make the manufacturing base in Australia stronger. There is therefore a great deal of relevance to the questions that have been raised here with us today.

In government, of course, there is always the question of allocating finite financial resources amongst the educators, and I do find some piquancy in being here today after the release yesterday of the Tertiary Commission's report and Schools Commission report, each of them demanding more public money for education. I do not know — and I speak from ignorance here, not having read these reports — whether either sector of education was prepared to concede anything to the other, or whether they were all demanding more of the pot of gold which the Commonwealth and State governments have. Maybe in the end it will be a decision left to the politicians — an invidious one as always, and one for which the Government will always come in for criticism. Nevertheless, I think it is something which you as educators will have to face up to, because you will have put forward to us in government your views as to where you see the priorities in education. One of the fundamental questions you are going to have to ask yourself is whether greater priority should be given to the resources which back up general education, or whether the general educationalists are going to be prepared to concede an increasing level of funds to be provided in the field of vocational education. Perhaps the panel will get some questions on that point. If so, I shall sit and listen so that I can make a better decision at the time of the next budget. However, I do think it is a question where there has to be a real contribution from education as well as leaving the final responsibility, for better or worse, to the politicians.

I was very interested to hear the emphasis given to apprenticeship. Recent surveys have shown that Australia is short, possibly desperately short, of tradesmen. We have, as a Commonwealth, pumped a considerable amount of money into subsidies for employers to take on more apprentices. This year our budget jumped by about $25 million to $54 million to support our crafts scheme, whereby a direct subsidy is given to employers. Therefore I was interested to hear again of the West German experience in imposing the legislation on employers to make a contribution themselves to provide vacancies for those moving into apprenticeship. I do not know that we have thought of doing that to employers yet, but I have certainly begun to exhort employers to acknowledge that they have a responsibility and that they ought not to leave it wholly to government. The tendency has been for industry and unions alike to say that the government should simply lift the level of subsidy or rebate provided, and hence spend more money.

But I do acknowledge that there is a very real responsibility on the part of industry to make a substantial contribution to supply itself with its own work-force needs. But, if I understood Dr Jochimsen aright, the purpose of the legislation in his country was not simply to have industry supply itself with its own needs, but to provide as part of an educational policy a much broader base of vocational education to the young people of West Germany. And that, I repeat, is a subject to which we all ought to address ourselves.

As a politician, I always find it unwise to speculate, or even to forecast. I have certainly imposed that rule on myself month by month as I comment upon the unemployment figures, and fortunately that wisdom has held me in good stead up till now. Of course, the figures have kept going down month by month. I am not sure what will happen when they start to go up at the end of the year when all the school leavers come into the labour market. However, I would conclude with this proposition — that you will see from here on, amongst educators and from within governments, including State governments, an acceleration of both consideration and action of the piace of vocational education in Australia. In this respect, I know I speak for my colleague, Senator John Carrick. We had the pleasure of lunching with Dr Jochimsen in Canberra just the other day, and we both found it a stimulating experience. In the context of the Williams Report, we have found ourselves continually propelled into a situation where we know, as a government, that we must give closer and more active consideration to this question of vocational education throughout Australia.

DISCUSSION

Selected Comments

DR JOCHIMSEN

We cannot, as educators, educate for any specific job which will last for a lifetime. We *can* educate and prepare for a working life that is different. Vocation, together with the concentration on structured skills that provide an avenue within a field of jobs, is a very important element in this. I say here and now that education, including technical and vocational training, cannot pretend to prepare for any specific job for a lifetime. But I do think, with respect to the joint responsibility I was referring to, that there is a necessity in terms of numbers to extend the same principle to the development of contract — in other words, for the new formulation and reshaping of vocation in this sense. I would be misunderstood if it were thought I am saying that more vocational training of whatever kind is better than none. I believe, rather, I am seeking a structural programme that actually brings into active interaction the various participants in this programme. In other words, in our apprenticeship modernization scheme, representatives of employers as well as of trade unions are working together to spell out the context of the future vocational structure.

This, of course, is a very antagonizing and daunting experience, because there are such diverse interests involved. First of all, there is the question of the demarcation problem in the trade union structure. Now the West German trade union structure is very different from yours — and I must say that it was a deliberate decision on the part of our union leaders to embark upon an industry-wide trade union structure. It was also a deliberate decision on the part of the government to accept an attitude of union leadership that was asking for participation rather than nationalization policies or activities. So this is mutually reinforcing, and we now have the pattern whereby every revision of the curriculum for vocational training under the apprenticeship scheme has to have the approval of the employers' representatives *and* the trade union representatives, so that there is agreement that what is proposed is useful, sensible, future-oriented training to provide marketable skills.

I do not hesitate to use this term. Marketable skills are useful skills which form a basis from which one can move on to some other development. So I would say that the creation of new vocations to provide job opportunities as well as for educational purposes calls for such a joint effort, and we have institutionalized this at the Federal level in my country by a Federal institute of vocational education, which is charged with the task of looking at the quantitative balance as well as the qualitative development of these programmes. The remarks I made about stop-gap measures, short-term retention schemes and parking devices for young people may, of course, just serve to postpone a decision rather than effectively prepare someone for it. So if the question is going to be asked, 'Are we spending enough funds for this or that?', I would say that it is not just the nominal topic we are talking about, but rather what I prefer to call a structural policy. It is easy to waste funds.

UU[47] 12

It is important that the educational branch prepare structured vocational education programmes, otherwise we may develop short-lived experiments that will produce the unemployed of the next decade, as someone has remarked about some of the short-lived cyclical type of counter-steps which have been undertaken.

An employer who takes on more apprentices in a job for which the training programme is very expensive may find himself poorly off competitively if he is left to go it alone. But if the nation as a whole is moving into that direction, competitiveness is being enhanced from a world-wide point of view. In this sense, I do not accept management's view when it says, 'Well, this is not a direct production cost, so we won't incur it.' By introducing a joint responsibility, you make sure that everyone moves into the same direction.

We are not exacting this merely from the private sector but from the public sector as well.

I should like to make just one final remark on natural distribution of talent. It depends, of course, on the level we are speaking about, but with respect to the most vulnerable groups — and we too have children of migrants, handicapped and disabled persons, early school leavers and so on — I would say that we make a greater rather than a lesser effort to educate them. The normal reaction is, 'Well, they are not able to get such and such a level of qualification and skills, so we might as well let them do with shorter training.' We think now — and we are gaining support throughout society for this view — that it is essential to have the same goal in mind and maybe take longer and expend more effort in reaching it. This again, of course, is very costly, but I believe that the programme should be measured rather in terms of satisfying human needs. Now I am not saying that we have succeeded in effectively educating vocationally 100 per cent of an age cohort, but we have reached 90 per cent and we are moving ahead to gather in these vulnerable groups where specific efforts are needed. I therefore do not see the talent structure as one to be given, but rather as one to be influenced, shaped and formed.

Justice Mary Gaudron

I am not sure that I have any precise statistics on this, but I think one has to distinguish between women (adult females) who are not mothers and who are at the beginning of their working lives; those who become mothers thereafter and continue in paid employment or revert to paid employment; and others at a later stage who perceive their mothering role to be finished. Certainly, the economic organization of Australia today is such that very few families can afford to maintain unemployed adult daughters in the home without their having access to the income which comes from paid employment. That is, in fact, a very considerable change from the nature of society which we had in this country, say, some 50 years ago, or even in my generation, when it was the expectation of educators and families that some girls, particularly those from rural areas, would go back and help the mother in the household upon completion of her secondary education. The economic realities are such that girls do have to join the work-force immediately upon

leaving school, and before they marry or become mothers. The statistics would suggest that something over 75 per cent of those who are mothers of young families are working through economic necessity rather than for satisfaction, career fulfilment or status. There are undoubtedly some who do elect to work for those reasons, but the majority perceive it to be their social, moral and family duty to provide an income to establish the family home and to provide the family with those material comforts which are perceived to be necessary. There are cases, however — and these are growing in number, I suspect — where at least temporarily, if not permanently, the mother is the main source of income in the family and, in fact, has to assume, even if on a temporary basis, the total responsibility of breadwinner.

I believe that the other major group, because of the breaking down of the central social organizations that previously operated in another area, such as the church and organized religion, find when their families have left home, or have themselves been launched into the work force, that work itself is a satisfying experience, which they enjoy and which provides them with opportunities to do other things that might not be available to them at that age-level if they were not part of the work force. And I think that group, perhaps, is the only group that makes a deliberate and conscious decision to join the work force as such.

Mr Viner

Perhaps I might be biased, having seven children, but if I could just take the point one step further and speak as a politician, I detect a strengthening within the community of the feeling that government should be showing more respect for the family that has only one income earner. This feeling manifests itself — some might say cynically — in increasing pressures for our taxation system to acknowledge the burden carried by the one-income family as against the two-income family. There is, too, among the Government back-benchers some very forceful discussion and some pressure being applied on the Government to recognize this through the taxation system. This, I think, is a reflection of changing social attitudes. There has been tremendous pressure from women for their status to be acknowledged by providing more opportunity for them to enter the work force; but I now detect a strengthening social attitude in that the community itself is calling on governments to show more concern for those women who choose to stay at home and who find that the status of housewife is one that is very much worth while.

Dr Jochimsen

May I make one short additional remark. The question I was referring to when I used the term 'status symbol' was slightly different. I was referring to the fact that, until now, with the extension of working life and life expectation, and with the period of child-raising becoming shorter relative to the total life-time expectancy, women are more and more tending not to accept — and, I think, very rightly — the view that their functions as mothers should determine all that they can do before and afterwards. Before they have children, they are put into the less skilled jobs, and afterwards they are not really given a chance to return. So I was not in any way questioning the function and role of the mother in raising children to a certain age to do

that, but the question is, 'Does it follow from there that women should be frustrated and should not have the opportunity for a fuller vocational career in society?' And here, I think, there is room for a lot of discussion and improvement with respect to setting up the work organization — part-time work versus full-time work, re-entry into the labour force by means of recurrent education, continuing education, etc. So I don't think that the simple model of either a full-time, life-long occupation or no viable and enjoyable job whatsoever should be left to the past. Nor do I think it is very easy to find answers as to whether women should stay at home or go out to work. I would say it is up to the woman to decide.

THE INDIVIDUAL AND THE WORLD OF WORK

1. GEORGE STRAUSS

My task is difficult and somewhat presumptuous. Summarizing the confusing evidence as to the changing relationship between individuals and work is difficult enough. But for someone who has been on this continent barely 48 hours, trying to do this in a manner which is relevant for an Australian audience is presumptuous. However, as a colleague who was in an almost similar situation once said, "If something is worth doing at all, it is worth doing badly".

I will discuss a variety of things. I'm going to talk about changing work attitudes (the so-called revolt against work), about the impact on these work attitudes of changing patterns of jobs, education, and above all the population bulge caused by the post-war baby boom. Then I shall take up the impact of these factors and also Women's Lib on work schedules, careers, and career planning. Finally I will say a word or so on the role of education in this area. And I will try to do all this in a half an hour.

But first a word of warning. This is an area in which events occur in fads and cycles, and it is especially difficult to distinguish between long and short-run trends. Further, in multi-cultural societies, such as the Australian and the U.S., we must be careful not to overgeneralize. Our various subcultures differ greatly, particularly in their attitudes toward work. The recent Vietnam refugees in the U.S. have adapted amazingly well to the U.S. work environment — far better, for example, than some of our other minorities.

A Revolt Against Work?

Recent years have seen growing concern in most developed countries with an alleged erosion of the work ethic. TV programmes as well as articles in newspapers, business publications and scholarly journals have warned of increasing work-place discontent, particularly among younger, better educated workers, who, it is suggested, are refusing to take their places as good organizational servants and instead are revolting against routine, meaningless, regimented work — whether it be on the assembly line or in the ranks of junior management. Presumably, since the generation now in its teens and its twenties was raised according to particularly permissive standards, it is especially resistant to authority. These youths are less afraid of economic insecurity than are their elders and less willing to defer gratification. Success to them is measured less in terms of promotions, pay increases, and money in the bank — and more in terms of doing meaningful work and/or of immediate self-gratification. Or so it is argued.

The alleged revolt against work has been blamed for a variety of ills: in the United States for declining productivity, in some other countries for political radicalism and, in this country (so I am told), for employers preferring to hire immigrants rather than young, native Australians. Almost everywhere the stultifying nature of work has been held responsible for poor mental and physical health and as contributing to strikes, turnover, accidents,

and absenteeism. Finally, it is argued that conditions will get worse unless drastic reforms are introduced in the work-place.

How valid are these gloomy diagnoses? Certainly there is some truth to them, but the indictment is often unclear. Is the revolt against all work in favor of pot and surfing — or is it just against boring, challengeless work? There is a great deal of emotional writing in this area, but hard facts are difficult to get. At least in the U.S., the picture is very confused.

Opinion Polls

Opinion polls provide us with little help. In the U.S. 80 of those surveyed report that all in all they are satisfied with their jobs; 47 say they are *very* satisfied. We get somewhat equivalent figures from other developed countries. When asked trickier questions, we get much the same results. Take this question, for example, "Knowing what you do now, if you had to decide all over again whether to take the job you now have, what would you decide?" Sixty-four per cent of working Americans say they would decide without hesitation to take the same job again.

But if you ask people how they feel about specific aspects of their jobs — such as wages, job security, or whether the work is interesting — you get very different results. These so-called facet-specific measures indicate a steady decline in satisfaction — enough to make it clear that *something* is happening, although what is far from clear.

But figures like these should be taken with several grains of salt. People may report that they are satisfied with their jobs *all in all* just to protect their egos. Jobs are very important in our lives. To have a bad job is to be a failure, and few people are willing to admit to poll-takers that they are failures. Thus when workers respond that all in all they are "satisfied" with their work, they may frequently mean only that they are resigned to their present jobs. Even though, when asked about specific aspects of their jobs, they report grievances, still they accept their lot. They are not actively dissatisfied; they accept the necessity of work, but many expect little intrinsic fulfilment from their particular job. For them work is not *expressive* (to use a sociologist's term), a source of satisfaction in itself, but *instrumental*, a means to an end — salary and economic security.

Adjustments to Boring Work

The extent of this instrumental or apathetic orientation depends on how one measures it, but it is clearly prevalent among workers on routine, boring work in manufacturing, and it also extends well into the office and into some levels of management.

Such findings should be viewed in perspective, however. There are many workers who centre their lives on their families, hobbies, or off-the-job social activities. For others the social life *around* the job can provide substitute satisfactions for those lacking in the job itself. After all, in the context of humdrum routine, human ingenuity is able to extract rich meanings from seemingly trivial events. Horseplay, lunch-time card games, gossip around the water cooler, and the like provide satisfaction, particularly, for those

classified by psychologists as stronger in "need affiliation" than "need achievement". As the job becomes less rewarding, the social group may become more so.

Most people eventually adjust to boring work in one way or another. Some find the adjustment easy; some find it hard; and a few never adjust — either they quit or they are among the small minority who report themselves actively dissatisfied.

I am most concerned about the middle group — those who make the adjustment but with difficulty, for they may have paid the highest price in terms of lowered expectations and damaged self-esteem. The actively dissatisfied for the most part can take care of themselves, but hard adjusters may be the great casualties of our industrial society — and with increased education their number may be growing.

For what it is worth, the greatest recent U.S. drop in job satisfaction (in terms of facet-specific measures) has occurred among the following groups: those aged 21-29 (the baby boom cohort); those with college degrees, but no post-graduate work; men (as opposed to women); and operatives in non-durable manufacturing. The growing discontent among operatives is not surprising, neither is the relative decline among men, given the substantial progress among women. What is surprising and disturbing is the drop in satisfaction among college graduates, in the past a well-satisfied group. I will say more about this in a moment (but first let me emphasize again that these are U.S., not Australian, data).

A Greater Demand for Challenging Work?

Ignoring dubious measures of job satisfaction, have there been any changes in what workers want from work? In particular, has demand for non-pecuniary benefits (especially job challenge) increased relative to demand for traditional pecuniary benefits (including pay and job security)? Again the evidence is slim (and is subject to many methodological problems). All during the 1940s and 1950s American workers generally ranked *job security* as the most important thing they wanted from their jobs. But by the late 1960s, job security had dropped to eighth place. Among blue-collar workers pay was first; among white-collar workers it was interesting work. Among both groups there was a continuing shift in preference from extrinsic (e.g., pay) to intrinsic (e.g., the nature of the job) factors.

This evidence suggests at least some change in the value-ordering of American workers. The post-war generation was the first not to grow up in the shadow of war or the Great Depression. As psychologists put it, workers' "low level" material needs are now largely satisfied and they now seek to satisfy their "higher order" egoistic needs. If so, they may be less likely to settle for apathy or even for a job which offers high income and a pleasant on-the-job environment, but no intrinsic satisfaction. *Possibly* for such workers money alone may no longer motivate. But today's luxuries become tomorrow's necessities. Wants grow at least as fast as paychecks, and I doubt whether economic motivation will atrophy as fast as some psychologists suggest. And declining economic growth rates may reactivate economic needs.

To return to my opening questions: there is little evidence of either a revolt against work or an erosion of the work ethic. U.S. figures suggest not active dissatisfaction but a growing mismatch between what jobs offer and what workers want from them. There is an increased demand for non-economic rewards, but little sign that economic rewards are disdained.

Jobs, Education, and Babies

These prognostications may make greater sense if seen in the light of some demographic issues discussed by previous speakers. Let me summarize these briefly, but emphasizing U.S. data, both because I know these better and because the U.S. experience may provide warnings for Australia.

Occupational Structure

One of the great social safety valves for the last century in most developed countries has been the growth in white-collar occupations. First, there was a shift out of agricultural employment into manufacturing and more recently out of manufacturing into various service occupations. The demand especially for managers and professionals grew by leaps and bounds, and the fact that the job structure was being continually upgraded meant that *everyone* could get ahead. As a consequence the vast majority of people in each generation held better jobs than their parents.

There is some evidence that this process has almost stopped, at least in the U.S. The latest predictions are that professional and technical jobs will increase slightly less rapidly than the work-force as a whole, and the big increases in employment will come in clerical jobs (this despite the computer). If the prediction is accurate, there will be a relative slowdown in the demand for jobs requiring high education.

Level of Education

Related to the past growth in professional and managers' jobs was an almost explosive demand for education, particularly in the years after World War II, and not just for professionals. In the U.S., for example, the average blue-collar worker had 9.0 years of education in 1948; today he or she has 12.2 years. But the number of highly educated workers grew faster than the jobs requiring such education, particularly since women now seek to use their education on the job. As a consequence we may have a surplus of well-educated people. One result is that many jobs for which a secondary education was once enough now require a university degree. Another result has been a reduction in the economic returns from education. The difference in pay between the secondary school and college graduate has been declining.

All this has contributed to making education less attractive. There has been a slight but real drop in the percentage of men who finish secondary school and a similar decline in those who receive college and university degrees. This decline has been largely balanced, so far, by a continued increase in female education. Nevertheless, the figures for both sexes seem to be stabilizing at about 90 per cent graduating from high school, 50 per cent entering college, and 25 per cent receiving a four-year degree. Of course,

this trend may be reversed, but at the moment it seems more than a statistical aberration.

Baby Boom — Baby Bust

Educators everywhere are vividly aware of the rapid increase in births after World War II and their later decline (a decline which began in the U.S. about 1958). Each year this massive cohort has its impact as it passes through the various stages of life. This phenomenon (which has been called the "watermelon passing through the boa constrictor") has occurred through much of the world, even in China.

The decline in births began earlier in the U.S. than it has in Australia, and it has gone further. Even though the immediate post-war generation was huge, it has been having its babies later and in smaller numbers. The white birth rate in the U.S. is barely at the replacement rate. This declining birth rate has left in its wake surplus teachers and surplus schools (I hope you don't have a similar problem in Australia). Already we have fewer teenagers, and this may have contributed to a slightly lower white youth unemployment rate in the U.S. and a slight reduction in crime.

The initial baby bulge led to overcrowded schools, then it contributed to college student riots, increased teenage unemployment and crime, and lowered productivity. Today the 1947 baby is 32 and in many organizations he or she is entering the lower levels of management. Those born in the early years of the bulge were rather lucky, since the age cohorts before them were rather small and they filled a vacuum. The late comers will have a harder time since the best jobs are already filled; in some cases they will have to wait until almost retirement until there are significant openings for them. Further, the scramble for good jobs may be particularly nasty because the extra-large cohort of men has been swollen by substantial numbers of women.

This scramble for jobs helps explain the sharp decline in job satisfaction among college-trained youths, especially males.

Women's Changed Role

The impact of women's liberation may be especially obvious in the U.S. because of our strong equal employment laws. We have had a revolution, not just in the number of women employed, but in the meaning of jobs for women. Women today want more than the opportunity to earn extra pin money and to keep themselves busy after their children have left. They want not just temporary or second-class jobs, but full equality with men at the work-place. Beyond this, educated women, particularly those whose husbands already earn a reasonably adequate income, demand meaningful and challenging jobs.

In the U.S. today, fully 50 per cent of all adult women work, a figure up from 33 per cent in 1948. The increase occurred first among women in the 35-64 bracket, but it has now extended to women with children under six, of whom 40 per cent now work. I understand that these changes are also occurring in Australia, perhaps even more rapidly than in the U.S., but since numerically you started from a lower base you have not reached

our levels *yet*. Interestingly, by contrast with the other trends noted above, the increase in the number of women working is not universal internationally. It is happening in English-speaking countries — in Canada at least as fast as Australia — and also in Germany. But female participation rates are declining in Germany, Italy, and Japan, and just holding steady in France. (On the other hand, the percentage of adult men who work appears to be declining worldwide, especially in the 45-64 age bracket, with Australia a laggard here.) For the U.S. already there has been a substantial increase in the number of female managers and professionals. In the Bank of America half the junior-level managers are women, up from very low figures a few years ago — and these women are rapidly rising in the ranks. Ten years ago, at my own university, only 5 per cent of our business school masters-level students were women; today the figure is over one-third. We now see female carpenters, plumbers, locomotive drivers, and sailors — all occupations previously entirely male.

The revolution has occurred amazingly rapidly and successfully. Ten years ago I predicted — foolishly in writing — that it would be much easier to eliminate discrimination against minorities than against women. In the first place, I argued, a job is less important for many married women than it is for minorities; secondly, women's family obligations are likely to conflict with their loyalties to their jobs; and finally sexual attractions were bound to complicate on-the-job relations. Ten years' experience proves that I badly overestimated all three problems. The role of women has changed dramatically, and not only on the job.

To make this change possible, a lot of other changes had to occur — and not just the addition of a second set of powder-rooms in previously all male domains or the elimination of the old American convention that if there is a woman on a committee she will automatically serve as secretary and make the tea.

New Work Schedules

Among the more serious challenges women provide are those to the traditional work week, which in the U.S. consists of a five-day week, with each day consisting of eight hours of work. For a while the so-called 4-40 week (four days of ten hours each) was popular, but more with men and childless women than among women and children. More recently we have seen a switch toward flextime, which allows workers broad freedom to pick the hours they work. Some flextime schemes permit workers to take time off to run personal errands; almost all allow work hours to be adjusted to fit family responsibilities.

A second demand is for part-time work, usually permanent part-time work, with the same protections and proportionally the same insurance benefits available to full-time workers. Here the United States is slightly ahead of Australia, but we are both working in the same direction. Part-time work is spreading rapidly in the professions, and there is some evidence that part-time workers are more productive per hour than are full-time workers. Certainly, part-time workers are very useful in filling out work peaks.

The ability to obtain part-time work may be critical for women who wish to combine a career and raising children. Switches back and forth from full to part-time work are becoming increasingly common: full-time at first, then part-time when one's children are little, then back to full-time when they grow up. Many Scandinavian countries have introduced the *glide*, which means that as workers approach retirement they gradually decrease the number of hours they work each year until finally full retirement is reached. This makes a lot more sense than plunging a person into retirement all at once.

Aside from the Scandinavian glide, men have shown less interest in unconventional work hours than have women, but this too may change. In some U.S. universities there are pioneering husband and wife teams, each filling a single slot, and sharing their teaching and other duties.

In practically all countries there has been union opposition to unconventional work hours, but this is weakening as increasing numbers of union members want the freedom that flex- and part-time work permit. Unions are also trying to reduce the standard eight-hour day, but there are many workers who, for a variety of reasons, want to supplement their income, either by working overtime or by taking a second job. So we may be moving toward a society where, regardless of the so-called standard work day, only a minority work it.

Careers and Career Planning

Flextime and part-time work are related to new attitudes toward careers and career planning. We see this in both men and women, but so far particularly among managers and professionals.

In the U.S. most large companies now have a manpower planning unit. This unit predicts not just future corporate personnel needs for various kinds of employees but also attempts to plan the careers of individuals. Often there are secret card files or computer tapes that indicate that X is good material for vice president, but that Y is not likely to go beyond section chief. X, at least, is destined for a series of promotions which will provide him or her with varied experience in progressively more-demanding functions. Very often these promotions are accompanied by transfers from one city to another. Thus, it is not uncommon for a rising young U.S. executive to be posted in as many as 10 cities in 20 years.

In the past it was assumed that, regardless of whether they were married, women employees would automatically reject opportunities for geographical transfer, while of course the dutiful wife would be delighted to pull up stakes to help her husband's career, even if this required giving up her job. Women's Lib has changed much of this. When both husband and wife work, it is recognized that the decision to move must be made jointly.

Even aside from Women's Lib, employees of both sexes are demanding greater freedom to determine their own careers. Instead of the traditional so-called *closed system* in which top management unilaterally determines who will move where, employees are increasingly asking for an *open system*, in which prospective job openings are widely publicized, with employees being given the freedom to decide the jobs for which they would like to be con-

sidered. Some employees may bid on high-risk jobs, where the chance of failure is substantial (and which may require freqent transfer). Others may prefer to stay put and refuse all offers.

Along with this, commitment to a single career is declining, even among men. So-called burn-out is characteristic of many professions. If you are on a job too long you begin to lose your sensitivity, your enthusiasm, and your creativity. What was once a challenge now becomes a bore or an oppressive burden. Educators are well aware of this. (That's why I am on sabbatical leave.)

To relieve burn-out, it has become increasingly common for U.S. organizations to grant their employees temporary leaves to take other work — for example, to work with the government for a while. Alternatively, an individual may decide to shift occupations permanently, perhaps shifting employers as well as jobs.

To help employees make career decisions, we see the rapid spread in the U.S. of *assessment centres* and *career planning programmes*. Assessment centres are modelled after some of the officer-training programmes in World War II. Here managers are put through several days of tests and exercises designed to show their strengths and weaknesses. Upon completion of such a programme, a manager may be told, for example, "You are highly skilled in one-to-one relationships, somewhat diffident in groups, and rather indecisive in making complex decisions." Armed with such insights an employee may enter a career-planning programme that is designed to help him re-evaluate his career goals and alternatives. Increasingly the employee's spouse is asked to join in the programme.

Open career systems allow employees to increase their options. A secretary may move into management and a manager may change companies. Education, of course, increases options, and there is a growing demand in the U.S. for what has come to be known as continuing education (and in Australia as recurrent education). Many U.S. employers now reimburse their employees for at least part of the tuition costs for courses taken after work. We have at least 100 000 students enrolled in evening MBA programmes and many of these are already junior managers. But continuing education is not confined to managers. Some union contracts provide for employer reimbursement for educational costs, and unions themselves are sponsoring a large number of courses. In San Francisco, our Institute of Industrial Relations has organized a three or four-year evening programme which leads to a degree in Labour Studies and hopefully to a job with the labour movement. Currently there are some 400 students enrolled in this.

Conclusion

The picture which emerges from these somewhat contradictory trends can be exaggerated, but it is reasonably clear that workers, particularly women workers, want greater freedom and challenge. People are less willing to stay put. Over-educated workers especially are finding it difficult to adjust to routine jobs. Members of the baby-bulge cohort are likely to be troublemakers throughout their lives: there are just too many of them. The eight-hour day is no longer sacred; neither is the expectation that men

will work and women will either stay at home or be restricted to limited occupations. More and more people will have multiple careers.

To risk banality: there are numerous challenges for education ahead. Though the demand for conventional education may decline, flextime permits greater opportunity to combine work and school. It is becoming increasingly common for men and women in their thirties or forties to take classes preparatory to career changes. The new planning movement provides greater opportunities for the vocational guidance profession. With more free time, there will be more demand for education as a cultural activity.

2. Dexter C. Dunphy

I want you to imagine that you have come with me to a university laboratory where psychologists are conducting experiments with rats. We watch the experimenter take a rat and put him in a maze with four tunnels and put cheese at the end of the fourth tunnel. The rat runs tentatively into a tunnel, stops, backs out; runs into another, goes to the end, finds nothing and returns. Eventually he finds the cheese in the fourth tunnel. After a while that rat will learn always to go to the fourth tunnel to get cheese. A human will learn that too. You want cheese? Zip, zip, zip down the fourth tunnel, there's the cheese. Next day you want cheese? Zip, zip, zip down the fourth tunnel and there's the cheese.

Now after a while the great god in the white coat moves the cheese to *another* tunnel. Zip, zip, zip goes the rat down the fourth tunnel. No cheese in the fourth tunnel. The rat comes out. Goes down the fourth tunnel again. No cheese. Comes out. Down the fourth tunnel again. No cheese. Comes out. Eventually the rat will stop going down the fourth tunnel and look elsewhere.

Now this is where the difference between rats and humans comes in. Most humans will go down that fourth tunnel *forever*, cheese or no cheese. Humans come to *believe* in the fourth tunnel. Rats don't believe in anything — they just like cheese. But the human develops a belief in the fourth tunnel and he comes to make it *right* to go down the fourth tunnel whether there's cheese in it or not. Most humans would rather be 'right' than get their cheese. And they will even establish schools to train the young to believe in the fourth tunnel and police forces to compel other unwilling humans to go down the fourth tunnel because it's the *right* one.*

Currently the rat's situation is our situation. In all areas of life we face an increasing rate of change and the pace of change continues to accelerate. Life is now moving the cheese about more rapidly and leaving us frustrated in our traditional tunnels. We are in a period when changes are not only accelerating but when change is discontinuous — shifting direction abruptly rather than simply extending long-established social trends. As a result, most of us today believe in too many fourth tunnels. We're getting a big charge out of telling others what's 'right', but being right no longer produces the results it once did. We have the warm glow of righteousness, but you can't live on righteousness forever. Our beliefs developed to sustain and direct our lives; they were designed so our social groups and our children would

*Example from Luke Rinehart, *The Book of Est*. London: Abacus, 1976.

not forget where the cheese was, but new realities have rendered our beliefs irrelevant. Our beliefs, which were once life-affirming, have become life-denying. The marking posts of meaning have been swept away in a torrent of change.

There is no area of social life where this is more true than in the area of work, and particularly in the relationship between education and work. Our social beliefs in this area were simple and easy for any individual to understand, namely:

—"If you want to eat, drink, be clothed, have a home and family, enjoy leisure, then you have to work."

—"If you want to do these things well, you need to get a good job."

—"If you want a good job, you get as much education as you can."

—"How much education you can get depends on how brainy you are, i.e. your ability."

From the point of view of most men in our society, therefore, work was life's central activity, providing access to personal prosperity. And education was the key to getting a good job. The situation was not quite so straightforward for women. Marriage was their key to prosperity, so it was not so important to get a good job as it was to get a husband with a good job. Consequently, for women, education and work were mainly valuable as avenues to meeting and impressing men with a potential for achieving a good job.

The world view I have described is now, however, in disarray. I will examine some of the factors that have brought this about but, nevertheless, we have been, and are still, brought up in a social world which is still suffused with values of the Protestant ethic. This world view was clearly described by early sociologists or social historians such as Weber and Tawney. Today, still, those activities not normally catalogued as 'work' are labelled school*work* and house*work*. The child who has not yet entered the workforce is occupied with school*work*, the 'non-working' wife is occupied with housework. Once we cease to be defined as an infant we are inexorably oriented by our elders, even by the language categories of our culture, to define the central reality of life as work. We may no longer believe that work is the spiritual path to eternal salvation, but we still view it as the only valid and viable path to an acceptable social identity, a share of the valued resources of our society, and a prime source of personal growth, fulfilment and satisfaction.

Traditionally, of course, most societies have needed the maximum output from each individual in order to produce enough to survive, or more recently, to acquire a widening range of goods and services that we regard as necessities. Now, with the advent of automation and computers, we have an increasing surplus of human labour. Yet we are still committed to work, spurred on by inherited values of another era and prodded by a reward structure which is itself a hangover from a period of scarcity.

Now I want to examine some of the changes that are challenging our traditional views of work and to which the individual must now adjust as he seeks a job or continues in one. I will look at some of the important

changes taking place in technology, the economy and in social and political values.

Technological Change

First, let us look at technological change.

Few people today are aware of the rapidity of technological change in Australia or of its tremendous impact on every major area of our lives. In 1972, in the ABC's Boyer Lectures, I drew attention to the importance of understanding technological change and I pointed to the rapid rate of change. Since then the pace of technological change has increased beyond my expectations. The Australian Government has recently recognized the national importance of the issue by setting up a Committee of Inquiry into Technological Change. The N.S.W. Government has appointed a Minister of Technology, the first such minister in Australia.

When it comes to rapid technological innovation, Australia is now right in the forefront internationally. But don't imagine that I mean we are leading the world in technological innovation in the sense of research and development. We are, in fact, one of the world's most backward nations in research. No. But we are in the lead in terms of the introduction of working technology developed elsewhere. Australia is being used as a technological test market for the rest of the world. We are an advanced, representative, developed economy with a small population, and half of that population is in two cities. We are the marketing expert's dream come true.

If you are a Japanese company developing anything from a new multi-million dollar high-speed canning line, a new car, or even just a new electronic component, you may choose to market your product here at the same time, or ahead of, Japan and the rest of the world. Or, if you are a Swedish company developing a new switching system for national telephone networks, Australia is a good place to test and debug it, particularly if Australia pays the cost. Or, if you are a U.S.-based multinational which has innovated in word-processing machines which will revolutionalize the offices of the world, Australia is a good place to start your marketing. As a result, our traditional international isolation is gone; we are being subjected to massive changes in the technological base of our society. The key choices are generally not our own; the important choices are made in offices in New York, Tokyo, Bonn or Stockholm.

So what? Does it matter? Yes — for two important reasons.

(1) Every significant change in technology changes our way of life. Henry Ford's mass-produced motor car transformed our pattern of living and made the modern city possible. Television transformed modern politics. The birth-control pill transformed the role of women and the relations between the sexes. Automation and computer control are transforming the structure of the workforce and the availability of work itself. We develop tools to control our world more effectively, but the tools also control us. One of the spinoffs of rapid technological change for us at the moment is an increasing incidence of industrial disputes centring around redundancy created by new technology.

(2) The second reason that technological change matters to us is that we depend on some of the most advanced technology in the world, but the technology is derivative. We have not invested in technological research and development and in many cases the automated factories and plants are serviced from overseas. Only routine maintenance is performed by Australian residents. When the industrial plant breaks down, the specialist is flown in from abroad to fix it. Or, in a recent development, he may remain in California or wherever, test the equipment by telephone line via satellite, and instruct a local technician what operations to perform on the equipment as he is conducting the long-distance tests. The local technician is then acting only as a pair of hands — a dummy to perform the routine physical operations — the brain is somewhere else.

The rapidity of technological change has become a problem for the enterprise. For example, the training manager of an international airline told me recently of one of his best aircraft mechanics who came to him to say that he (the mechanic) could not make it through another change in aircraft design. He explained that he had been able to cope — just cope — with the last set of design changes, but that he was sure he would not be able to adapt to the next set. The training manager decided to have a look at apprenticeship training to see if something was wrong there. There was. In one course they were still teaching apprentices to repair aircraft fabric. (Now that's respect for tradition!) But eventually he discovered that the critical problem was not so much the irrelevance of some of the pre-work training. What was wrong was the whole notion of training someone, years in advance, for something that would no longer exist when the individual came to look for it. And so, this training manager came to question one of our big fourth tunnels — *preparatory education*.

Technological advances are now coming upon the world of work in faster and faster waves. Society's success in coping with each wave of new technology depends ultimately on the ability of people at all levels of the workforce to understand the new technology and to modify their behaviour appropriately. However our *education system* in particular is being bypassed by the speed of technological change. The old model of accumulating knowledge and refining it in schools and universities to be passed on to later generations is finished. Ours is a technologically-based society, but even our schools of engineering can't match the speed of change.

We have believed that extended periods of schooling in childhood and early adulthood and intrinsically good for the individual. By and large, this idea worked for us. Last century we started by instituting elementary education for the poor — we taught them to read and write so they could read the Bible to improve their spiritual life and, incidentally, to help them be more effective factory workers and clerks — hard-working, conscientious, abstemious, with enough of the 3Rs to read words like "Stop", "Go", "Danger", and to tot up figures in ledger books. It worked, so we eventually made elementary education compulsory and universal. Our economic development took off. We began to add secondary education for a selected elite. This fed talent from below to the ranks of society's managers. Stimulated by success and by the burgeoning of new knowledge and technology, we expanded tertiary

education. We created more and bigger universities, C.A.E.'s and technical colleges. We believed in education for work — the more of it the better — the longer spent in preparation the better, particularly for those with talent. In 1976, Australia spent $316 million on formal education of this kind.

Unfortunately, formal preparatory education has become a multi-million dollar fourth tunnel producing less and less cheese. Presumably, the idea was to invest in preparatory education to produce more people with relevant work skills and a knowledge of the working world which they were entering. We also wanted those with the most intellectual talent to go furthest in the educational system and eventually assume the most responsible positions in the economic and governmental structures of our society. As I shall show later, the idea never worked perfectly, but it worked well enough.

Now, however, this 'front-end' model of education is failing dismally. Knowledge, particularly technical knowledge, is changing so rapidly that it is outdated long before it filters through to the formal education system. Schools are producing generations of children increasingly out of touch with the realities of the economic world. That is not surprising, as most of their teachers never enter that world, let alone understand it. Out-of-touch and out-of-date teachers never produce in-touch and up-to-date pupils.

The rapidity of technological change is transforming the world of work several times within a generation — making existing knowledge and skills redundant, demanding new patterns of personal and interpersonal behaviour. The result is that preparatory education no longer prepares the individual for work. A new model is needed. I shall look at this later.

Economic Change

Now I would like to move on to some of the significant economic changes we are experiencing and their implications for work and education.

In terms of age, we are an unusual and unrepresentative group here today. The majority of Australians are under 28 years of age. I was born in the Depression but I don't remember it. I do remember the war — crouching under a table covered in mattresses as the sirens sounded the Japanese submarine attack in Sydney Harbour. But still, these are faded, patchy memories. The world I experienced and which shaped and formed many of my adult attitudes and values was a bolder, brighter world. I am, psychologically, a child of the post-war economic boom. The education escalator worked for me. I worked hard but the escalator was moving onward and upward anyway — for me and many others. Business was booming; the economy was expanding; economists were confident and respected; every day in every way everything was getting better and better — which was, after all, a just reward for winning the war. I guess most of *you* also acquired a lot of your values and attitudes in that economic period too.

It was very easy to become complacent in such a period. If everything was going so well, we must be doing *something* right. And so, I believe, we were. We were able to create large, resourceful, effective bureaucracies for mining, manufacturing, distribution and a range of new and complex services.

But, almost overnight it seems, we ran into a blank wall and an emptiness at the end of that tunnel. And, like all other technologically advanced societies today, we have entered the low-growth or no-growth economy. From high economic growth to no economic growth in ten years. Where has the cheese gone?

Underlying the decline in the economic growth rate are two massive forces which have emerged as critical factors in international affairs in this last third of the century. First, there is the rapid exhaustion of cheap fossil fuels like oil and coal. The economic expansion of industrial societies was made possible primarily by the ready availability of cheap energy sources of this kind. Between 1900 and 1970, world energy consumption rose from 650 million metric tons of coal-equivalent to 6600 million metric tons — more than a tenfold increase. The bulk of that increase occurred in the 1950's with oil coming out of the sands at a dollar a barrel. The rapid expansion of demand has brought about an equally rapid depletion of these finite resources with a corresponding increase in prices, particularly of petroleum. We are now running out of oil — how fast depends on prices — but oil won't carry us to the end of the century.

The other significant factor affecting our economic growth rate is the explosive expansion of world population and the shift in the location of world population.

By the end of this century the world's labour force is expected to increase by over 1000 million men and women. During the next 10 years alone, 300 million extra people will be looking for work, most of them in the less-developed countries. The locus of the world's workforce has shifted to the Third World economies where wages are low. As a result, our biggest current export is our manufacturing industry itself, which is being relocated in Third World countries. Between 1974 and 1978, 200,000 jobs disappeared from the manufacturing sector alone in Australia. This represents a decline of over 10 per cent in employment in the sector in just five years. Overall this year, jobs have been disappearing at the rate of 10,000 per week and the Melbourne Institute of Applied Economic and Social Research estimates that the real level of unemployment in Australia is about 14 per cent. As a result, we are moving towards a stable-state economy or a *no-growth state*, and we are not alone. The increase in Gross World Product slackened to about 2.6 per cent in 1974 and stabilised. At the same time, the developed economies, including Japan, found the growth in their Gross National Products slowing to about half of 1 per cent. The developed economies of the world have ceased to grow significantly in economic terms. At the same time, they have experienced significant inflation. In Australia this is now running at about 10 per cent.

One consequence has been a major increase in unemployment. While this is a problem for all advanced economies, it is a particular problem for Australia. Of all the O.E.C.D. countries, only Italy has a higher rate of youth unemployment than Australia. I shall look later at where these young people come from, but let us realise now that youth unemployment has tremendous implications for education. We must ask ourselves — what are

we preparing young people for? In a situation of full employment, obviously one major purpose of education is to fit young people for a useful vocation. But what of the increasing proportion of young people who have no hope of a job? What are we preparing them for? The labour force survey for December, 1978 showed that 22.6 per cent of 15-19 year-olds were unemployed. In some suburbs of Sydney, over 50 per cent of young people under 25 are unemployed.

Youth unemployment is one of the most acute problems facing modern technologically advanced societies. There are no short-term solutions. The problem is related to long-term structural changes in our society which are new and are not transitory.

We have always assumed that one major aim of schooling was to prepare children for work. What now?

Social and Political Value Changes

In Australia in the last few years there is no area which has been the subject of such vast change as the area of our moral and ethical values. I, for one, do not decry this. I am not one of those who thinks that our moral standards are in full decline and that the answer is to turn back the clock, even if that were possible.

On the contrary, I think that we are in a stage of cultural transition, a fundamental re-evaluation of traditional beliefs, an acceptance of diversity of values. I think that a radically different social environment demands radically different values.

One fact alone would have destroyed our uni-moral society and broken the prevailing uniform value system: post-war migration. In the last 25 years, Australia has brought in over three million migrants and these people have created substantial changes in our 'British' way of life. Melbourne, for example, now has the third-largest Greek-speaking population of the world's cities, including those of Greece. Australia now has the highest proportion of overseas-born workers of any country in the world except Israel. You can't gobble up three million migrants from diverse cultures without getting indigestion in your rather plain old value system.

But in addition to this locally-inspired ferment, let's not forget that all of us, adults and children alike, have sat glued to our T.V. sets over the last few years and been transported to the world's cultures, ancient and modern. And our active media reporters have been busy buttonholing everyone with a different point of view and presenting him to us for our edification. And the more value contrast and conflict, the more interesting the programme — at least as far as news and current affairs are concerned.

We now live in a multicultural, multivalued, multimoral society. As a society, we also face ethical issues for which there are no precedents.

So, as educators, we cannot pretend any longer that we are inheritors of the One True Way and conduct a simple-minded indoctrination into a unitary value system. If we do, we will be found out by our pupils and written off with all the other adult phoneys.

Schools in Australia drew, in the past, from a particular ethical, cultural tradition which had an accepted status in this country. This tradition was British, elite and Christian and came down directly from Matthew Arnold of Rugby. It was embodied in British colonial education throughout the world and its values were embodied in books and journals for children which were standard reading for generations. Remember the Boys Own Paper?

Not that Australians were church-attenders or actively practised the values. But they had no doubt that they were the *right* values. To quote an old Roman proverb, the average Australian "saw and approved of the higher course of action, although he lived by the lower". Australia was in this sense a unimoral society — there was tacit assent, at least in theory, to a single set of values. Each child could recite each morning "I honour my God, I serve my King, I salute my flag"; "Hands up! Hands down!" said the Headmaster. One might be a bit cynical about whether you and 'yer mates' really lived by this, and you rejected the public piety of the performance, but deep down you believed that was the way it *ought* to be — God, King, country — those things in that order. And the charge of the Light Brigade did take place — officers weren't shot in the back when they gave unpopular orders, as they were later in Vietnam.

That world has disappeared. The structure of authority is shattered. The reverence and the obedience are gone. The universal assent to the one God, to the one country, right or wrong, to the one sovereign or to any sovereign, president or boss is finished. There is no accepted set of rules any more; there are no sacred institutions — even the sanctity of marriage has given way to the mutual convenience of living together. Parents who once would have felt justified in preserving their 18 year-old daughter's virginity with a shotgun now grudgingly provide secondhand furniture for the unmarried couple's flat — and then file their own divorce papers.

If education is to examine value issues (and there is no alternative), let us at least be honest and admit that there are no unwavering certitudes. The best we can do for those we teach is to appreciate the reality of our current ethical dilemmas and model, as well as we are able, sensitivity to ethical alternatives, the practice of ethical judgment in the face of imponderables, and confrontation of the real ethical dilemmas of our age. The ethical issues faced by decision-makers in the economic and political bureaucracies now and in the next few years have immense dimensions. I am tempted to think that wisdom and ethical questions may be more important than intelligence and IQ's. If we have the courage to attempt this task with humility, we may discover that we teach best what we most need to learn ourselves.

We live in a democracy and the pursuit of equality has been the major political theme of this century. The question of what 'democracy' and 'equality' mean is one of the most vital questions of our society and is another area where our values are changing.

Democracy is never established; its pattern is never complete. In a society undergoing rapid change, democracy must be re-thought, re-worked, fought for and re-lived by every generation. There are no exceptions.

What we have lived for, worked for, and what many died for, is now part of the history of the development of democracy — not its future.

Many of our private and public bureaucracies, including schools and colleges, are the final bastions of authoritarian government in our society. While they pay lip-service to democracy, they want it to take place somewhere else. Now, whatever we think of it, time is running out for authoritarian management in developed societies. I am prepared to predict that, over the next 5-10 years, one of the most profound changes in our society will take place around the issue of what has been variously called 'industrial democracy' and 'worker or employee participation'.

The big new event is a demand for *participatory* democracy to supplement *representative* democracy. People at all levels of society are demanding to be given a slice of the action instead of a spectator role. Unmodified representative democracy has become a fourth tunnel phenomenon. Unless we create new forms of participatory democracy, our society will be increasingly paralyzed by the kinds of direct action we have seen from truckies, airline pilots, tanker drivers and many other strategic groups — even teachers.

Most Australians in managerial positions seem sublimely unaware of and unaffected by what has already happened in this area.

In Europe, various forms of industrial democracy are well developed, have been in operation since the 1960s at least, and play a major role in the operation of important enterprises. The forms vary from one nation to another. In Germany, for example, employee-elected works councils have been operating in large organizations for decades but in addition, for some years now, all important enterprises have half of the members of the boards of directors elected by employees. In Sweden there has been more emphasis on increasing employee influence in day-to-day decisions at the workface. Both Germany and Sweden have been more successful economically than Australia.

In Australia the two main political parties have adopted policies in favour of developing an Australian form of democracy in the workplace. The ACTU has now established a formal policy which it is proceeding to implement at the moment. The question for Australia is no longer "Will we join Europe in establishing some form of power-sharing in the workplace?" but rather "What form shall we establish?" Whatever form of industrial democracy evolves in Australia in the next few years, it will mean that employees at all levels will have the opportunity and the responsibility to play a larger role in the management of the enterprise where they work. Democracy therefore will not be simply exercised day-to-day by the few occupying seats in parliaments and by the many at a polling booth at infrequent intervals. Rather, it will involve ongoing commitment to participating in planning and implementing changes at work.

If we are to have citizens who are to play a part in widening the scope of democracy, let them begin practising participation in decision-making at school. I do not mean by participating in some mock exercise, but by playing an increasingly responsible role in the real decisions affecting how they live and work together at school.

This will affect schools in two ways — firstly as organizations, schools cannot escape revising their authority structures to give employees more power in the way the school is governed and operated. If the European case is any precedent, this may be legally required. Secondly, the school itself will necessarily become a laboratory where students can learn what political participation means. As General de Gaulle once remarked: "Politics is too important to be left to politicians". In schools this means that education for citizenship must be more than the learning of political dogmas, documents or structures. Education for citizenship must happen through active involvement in day-to-day decision-making.

And a side benefit of giving pupils more responsibility, as a recent British school study shows, is that the school will be better academically and have fewer behaviour problems (Michael Rutter *et al., Fifteen Thousand Hours*. London: Open Books, 1979).

So let us examine where we are now in Australia in the workday world — what are the critical characteristics the individual confronts occupationally?

First, the world of work is dominated by large, complex bureaucracies. The central organizing principles on which these bureaucracies once worked and often still do, are as follows:

—centralized administration,

—authority of position and seniority,

—authoritarian management,

—tall hierarchies,

—rigid procedures,

—repetitious, narrowly-defined jobs,

—close supervision,

—slow decision-making.

Bureaucracies of this kind are now creaking and cracking under the strain of rapid technological change, changing workforce and societal values, new economic demands. There is therefore a major revolution in organizational design, management style and procedures which is well under way. This revolution is introducing more variety, flexibility and adaptability into organizations. The individual beginning work encounters a world in transition — he may encounter one of our traditional bureaucracies operating much as it always has or he may enter one of our advanced post-industrial organizations. More than likely, however, he will enter an organization in transition — with elements of the old and new orders and all the confusions that that involves. His major problems will be to gain entry to this organizational world, cope with the rate of change and to make a creative contribution to the developing order.

Meanwhile, the workforce has been changing:

—there has been a significant rise in the educational level of entrants to the workforce;

—there has been a dramatic increase in the participation of married women in the workforce, particularly in part-time jobs;

—there has been a decline in the proportion of the labour force in blue-collar operations and in the rural sector;

—there has been an increase in the proportion of the labour force involved in the tertiary sector;

—the workforce has become the most multi-ethnic workforce in the world, after Israel;

—there has been a marked increase in unemployment, particularly in youth unemployment.

(See G. W. Ford, "Employment", *in* A. F. Davies, S. Encel & M. J. Berry (eds.), *Australian Society: A Sociological Introduction*, 3rd ed. Melbourne: Longman Cheshire, 1977.)

Not only are organizations changing but the workforce is also undergoing marked change. There is no sign that the rate of change will lessen in the future, only that the directions of change will be less predictable.

Preparing for Work

Now let us look at the process of getting ready and being readied for work in Australia. How is the individual socialized into work in this country?

It is here, of course, that the school plays a major role. Schooling or 'school work' is our society's major institutional method of preparing children for work. We should remember that it is a massive, multi-million-dollar social commitment. We need to keep in mind too that schooling of this kind is a relatively recent innovation — a brainchild of this century, a development of the late industrial era. Its central slogan has been "free, universal education to provide equal opportunities for all". Schooling is therefore a huge social mechanism to prepare children for employment and to select and channel them into appropriate levels within the workforce and into particular jobs at those levels. Schooling may, of course, attempt to do more than this, to provide other social and personal benefits; but if it fails to perform this vital and minimal function, the basis of our technologically-advanced society is threatened and there will be a massive social reaction against education.

How does schooling, as a selection process, operate? Well, a national survey of school-leavers in 1971-72 showed that of children whose fathers were professionals and administrators, 21 per cent of girls and 29 per cent of boys entered university. The corresponding figures for children whose fathers were semi-skilled or unskilled labourers were 2 per cent of girls and 3 per cent of boys (quoted in R. W. Connell, "Class"—Chapter 1 *in* Davies, Encel & Berry (eds.), *Australian Society: A Sociological Introduction*, 3rd ed. Melbourne: Longman Cheshire, 1977, p. 3).

Clearly educational selection is strongly class-biased. In Tom Roper's book *The Myth of Equality* (Heinemann, Australia, 1972, pp. 16-21), there is a very extensive review of a range of studies relating occupational and educational status of parents to their children's probability of entering

university. All these studies show that university entrants are most likely to be children from higher occupational-status families with parents who have above-average educational experience. They are likely to be male and from metropolitan rather than rural backgrounds. They are drawn disproportionately from private, non-Catholic schools. Conversely, those least likely to reach university are from families with lower socio-economic and educational status, from public schools, to be females and country students. For these students, the doors to the professions are virtually closed.

Social Class

If social research has established one indisputable fact over the last few years, both here and abroad, it is that social class, not schooling in itself, is the major determinant of the individual's final position in the occupational structure. All the massive effort we put into establishing a free, secular education that would provide equal opportunity for each individual to progress on the basis of his intrinsic abilities and merits has been a failure — a fourth tunnel phenomenon. And all the signs are present now that the little equalising effect achieved in the past will be lost in the future. Schooling, in fact, does exert control over access to opportunities, but on the whole it has worked to sustain rather than to ameliorate social inequality. And the signs are that the little equalising effect it has had in the past was related to a high economic growh rate. As we enter a period of zero or minimal economic growth and high youth unemployment, the minor equalizing role played by schooling in the past will be lost in the future.

I want now to examine how the systematic social class bias of the formal education system operates and then show how this has a fundamental effect on the individual's chances of getting a good job.

Most adolescents are quite uninterested in bookish culture, whether the books are light or heavy reading. (This is clearly documented in W. F. Connell, R. E. Stroobant, K. E. Sinclair, R. W. Connell and K. W. Rogers *Twelve to Twenty: Studies of City Youth*. Sydney: Hicks Smith & Sons, 1975.) Adolescents' interests focus on the popular media of T.V., radio and records, on social activities, and on active pursuits such as sport. "What the schools socialising effort does is to select out from the mass of pupils a scholarly type, to which it accords success" (Connell *et al.*, above, p. 222). This scholarly type has a mean IQ at sixth form of 115 and IQ is closely related to ability to succeed in school examinations. Connell *et al.* also show that intellectualism of this kind is positively correlated with interest in school life, a feeling that schooling is important, an expectation of staying on at school and an orientation to adult life. By contrast, the mainstream of the adolescent subculture is the mirror image of this — present rather than future-directed, tuned in to the popular mass media rather than to books and oriented to peers rather than to adults.

And within Australian schools there is still a remarkably uniform organizational culture. Although there are three major streams — state, Catholic and independent schools — the variety in these schools is mainly due to the differing social backgrounds of the pupils enrolled in them and in their

administrative practices. In the classroom, where the school meets the individual, there is a massive uniformity in approach which has been noted by almost every leading visiting educationalist for the last 50 years. Schoolwork, as experienced by the individual student, is generally still organized in an authoritarian, regimented, specialist subject-centred way. It is the rare student who cannot predict, weeks in advance, what he/she will be doing in any one of the six hours of the five-day school week, where he will be sitting and who will be directing his learning. In the immortal words of my 15 year-old daughter, what is perfectly predictable from this pattern is that, whatever and wherever the schooling is being undertaken, it will be "boredsville". Predictability may provide security for those who operate the system but it creates boredom for those finding their way through it, regardless of class background.

But class background makes a definite difference in motivation to succeed and knowledge of how to work the system despite the apparent irrelevance of schoolwork and the boredom of school routine. A series of large-scale Australian surveys all give evidence of higher educational expectations among teenagers from higher-status backgrounds, or in schools where the general level of social status is high. (For details, see R. W. Connell, *Ruling Class, Ruling Culture*. London: Cambridge UP., 1977, p. 154.)

Social class background helps first in providing models with which the child and adolescent can identify, models not too different from those provided by middle-class teachers. Of all the ways that learning takes place, identification and imitation are the most powerful. The normal upper-class and middle-class child from an intact family has already identified with parental and other figures who share many of the values of the teachers he/she finds at school later in life. From these figures he/she has internalised or partly internalised many of the values reinforced in schools — values of regularity, punctuality, neatness, tidiness, patience, obedience, initiative, competitiveness and, above all, the ability to delay the gratification of immediate needs for longer-term ends. He/she has learned that it pays to orient to adult desires and wishes — that in the longer term there are reasonable rewards for doing so. Above all she/he has learned to reason and to be 'reasonable', so she/he is oriented to adults and to intellect which is the province of 'reasons'. And she/he is at home with *words* and has attained a level of verbal competence which holds him/her in good stead in a classroom situation where words are the medium of instruction and the basis of assignments and essays.

Very importantly also, she/he has learned from these adult role-models to aspire to high-status occupations. As one upper-middle-class child of nine years of age said to me recently: "I want to be a scientist and mum says I'm brainy enough to be one." Long before they leave school, middle-class children believe they can hold down the more prestigious jobs in the occupational structure. On the other hand, working-class children believe, before they leave school, that they cannot gain access to 'educated' occupations such as the professions. If their aspirations fly upward, they are more likely to aspire to skilled trades. Those that aspire to white-collar work, and some

do, are likely to shift to more remunerative manual operations later. (P. Brannen (ed.), *Entering the World of Work: Some Sociological Perspectives.* London: Dept. of Employment, HMSO, 1975, p. 13.)

For the middle-class child too, acceptance of parental authority means that if commitment flags, the parent usually refuses to allow the child to drop out of school until at least a year has been repeated. From his parents, too, the middle-class child learns how to work the educational system, for his parents have been there before him and can provide guidance.

By contrast the working-class child has learned to prefer action rather than talk; he/she has developed a vocabulary that is emotively expressive but, in academic terms, what Bernstein calls "a restricted code". To be shut in a classroom, in immobilised passivity is bad enough, but to be asked to engage in the elaborate verbal gameplaying of schooling about issues of no concern to him/her is worse; and there is no reward system that makes the irrelevance even mildly palatable; no adult figure whom one could honestly emulate. The traditional working-class emphasis on collective activity or 'mateship' has to be sacrificed also — helping one another is frequently described as 'cheating' by middle-class teachers. And to the parents of the working-class child, the education system is just another intimidating and mysterious bureaucracy. There are left only two alternatives: to rebel, or to conform but not identify. To remain in the system longer than necessary is not only to accept "boredsville" but also to remain, in social-class terms, a child rather than an independent, money-earning adult.

Parental values of all classes favour education, if we can believe the survey responses. But the depth of conviction of most working class parents and children wavers in the face of a school world organized by the middle class for the middle class. There is also a difference in real resources available. Middle and upper-class families not only *believe* in education, they have the money to invest heavily in it for their children. They have more disposable income after living expenses and a substantial part of it goes into purchasing places for their children in non-state schools, into coaching, books and so on. Well-off parents use their resources to ensure that their children have access to education and educational options, particularly higher education. This is one way that inequalities in income in one generation are maintained in the next.

Bob Connell has documented through interviews how the working-class adolescent of 16 or so copes with his experience of relative failure in the school setting. These teenagers, interviewed by Connell, correctly perceived the emphasis on intellectualism in school and made statements justifying their failure to achieve in school and to seek higher-status vocations with words like "I don't think I've got the brains really." (R. W. Connell, *Ruling Class, Ruling Culture.* London: Cambridge UP., 1977, p. 152.) In the world of meaning constructed by the working class, "You've either got brains or yer don't 'ave brains, and that's it." Connell also reviews studies which show conclusively that, *within* schools, children in higher grades tend to have parents of higher socio-economic status while children in lower grades tend to have parents of lower socio-economic status.

The school reinforces social-class differences; it does not obviate them. Even the bulk of scholarships go not to the needy poor but to the children of those in the *upper* occupational groups. Success and failure in the school system affects the individual's self-concept and, in particular, his/her self-esteem. This is reinforced by the process of stereotyping in schools where children can be labelled as 'no-hopers' and 'the dummies'. The stereotyping process can be remarkably systematic and even organized via report cards which follow a child through his school career. I remember receiving one once where the headmaster had written "Mother's a fool; son takes after her." From the United States come even more ominous phrases like 'terminal student' and 'de-selection'.

Schools are themselves bureaucracies and sub-parts in most cases of large, traditional bureaucratic systems. Schools are therefore bureaucratically organized, with rigid hierarchies, stratified status positions and so on. Similarly schoolwork is structured much like paid work — differentiated, compartmentalized, repetitious, closely supervised. Consequently those who are the products of schools are fairly well adapted to fit into traditional bureaucracies; the most successful products are well on their way to future positions of bureaucratic leadership.

However we should be careful to avoid assuming that socialisation is a top-down, one-way process. Many sociologists assume that this is so, that the individual is passively moulded by his social environment. On the contrary, children and young people are active learners and seek meaning in their environment. The individual is not just the passive recipient of his social heritage — he seeks personal models, creates social networks, undertakes activities, constructs social meanings and chooses between the social options available to him. However, on the whole, people seek those others whose behaviour is congruent with their own; they identify with others who are 'like me or us'. Class consciousness emerges from this growing perception of like-mindedness, sense of shared values and familiar behaviour. Wild calls this 'status awareness' and suggests that it defines 'with whom you are prepared to mix as an equal.' (R. A. Wild, *Social Stratification in Australia*. Sydney: George Allen & Unwin, 1978, p. 97.)

An important but relatively neglected aspect of socialisation in this regard is the adolescent peer group. In my own fieldwork in this area some years ago, I documented the way in which the free association peer groups of adolescence replace the family as the key socialising influence on the child. Peer groups form basically along social-class lines and are at first strongly influenced by residential location and school (i.e. classroom) membership. Peer groups, as I have stressed in my book *Cliques, Crowds and Gangs* (Cheshire Press, 1969), develop powerful subcultures which express social-class behavioural patterns and values. In Sydney, for example, the young people of the eastern seaboard identify a strong subculture of such groups whom they refer to as "the Westies". The subculture is associated primarily with young people from the western suburbs of Sydney who invade the eastern beaches in brightly decorated, 'hotted-up' panel vans with surfboards glued to the roof racks and stickers reading "Sin bin" and "Don't laugh — your daughter may be in here."

However my children are quick to point out that you don't have to live in the western suburbs to be a 'Westie' — it is a behaviour pattern associated, in fact, with a working-class background. As such, this subculture has its own symbols, its own dress, its own popular heroes and music. In the 50's the 'Westies' were the 'Rockers' — the symbols have changed but the deep rivers of social-class experience and attitudes run basically the same course as they did then.

Social-class values, including those relating to education and work, are consolidated in peer cultures of this kind. So against this background we can now consider the ideology of equality of opportunity. Here I can do no better than to quote Berry in his excellent discussion of "Inequality" in Davies *et al.*, *Australian Society* (A. F. Davies, S. Encel & M. J. Berry, *Australian Society: A Sociological Introduction*. Melbourne: Longman Cheshire, 1977, p. 44):

> "The principle of equality of opportunity does not, as is often implied, promise an equal opportunity for all to *win* the race, merely to start together. Of what possible use is this guarantee to a middle-aged heart patient with weak ankles lining up next to the current olympic champion? The cruel joke practised on the mass of humanity by being granted the opportunity to lose ingloriously to the able few is heightened when it is realised that the rules of the race, as well as its prizes, are determined by the ruling elite. Only those capacities and abilities sanctioned as relevant by those who possess them count in the reward structure. The race will be run over a certain distance, no longer or shorter, on land not water and, in a modern industrial society, it will be a race related to material production and gain, not more passive or inner-directed pursuits such as the private production of poetry or of spiritual awakening or of any of the alternative pursuits of a deviant counter culture."

On top of this class bias of schooling is the particular problem now confronting the central idea of preparatory education. The rapidity and unpredictability of change poses a particular problem for schools. A major function of schools has always been, and always will be, to prepare children for life. At their best, then, schools affirm life; their curricula are rooted in the realities of contemporary life; the activities that go on in them reflect the central preoccupations of society and consequently have face-validity for children and youth. In this situation the pupil readily sees the connection between his learning and his life and the lives of those about him.

When we lived in a more slowly changing world, there was little or no conflict between tradition and contemporary life. Tradition enshrined the best knowledge of how to get the cheese and any child could see that. Now, however, the child can see that much of what is taught in schools is outdated fourth-tunnel nonsense. Much of what is taught not only makes nonsense of the child's experience of the world but the child sees that school learning will actually obstruct and confuse his ability to understand, cope with and control his world now and in the future. And let us not forget that, through T.V., the child has instant, visual, push-button access to a wider world than

we had when we were growing up. Without leaving his home he can be watching a riot in the streets of New York or starving children in Africa.

School pupils can see that much of our curriculum is outdated and irrelevant. The trouble is that we adults can't — we *believe* in our fourth tunnels.

The expansion of preparatory education has also led to the rise of 'credentialism'. By credentialism I mean that in order to get a job you have to have the right credentials, and as there is more education, the required credentials for any particular job tend to increase. Now this would be fine if the credentials were really related to the knowledge, attitudes and skills needed to do the job. But, because of the relevance gap, increasingly they are not. What they mean instead is that the person with the credentials has simply spent more years studying outdated, irrelevant, preparatory material. Even occupations such as nursing, which traditionally combined training with work, are demanding higher educational prerequisites which involve undertaking training in educational institutions removed from real patients.

We have created an education system where for an extended period of years, youth are cut off from adult society. They are located in an artificial, age-segregated and sometimes sex-segregated world where they are deprived of relevant adult models. Most of the adults they spend time with are teachers who are also trapped and isolated in the same world. It would be difficult to design a system which would more effectively subvert the aim of preparation for life and work.

Let me make clear that I am not decrying theory or trying to eliminate teaching or training. We need more of all these things, but we need them in a setting closely related to the realities being managed, be they people, processes or machines. I believe that when theory and practice proceed together, they breed *wisdom*, which is perhaps the scarcest human commodity today. Alone, theory yields ungrounded arrogance. On the other hand, practice without theory leads to repetition without learning and a consequent inability to cope with change.

Clearly, one of the central aims of education must be to provide opportunities for children to learn intellectual skills, particularly in a technological age. But isn't it strange that, although this aim has been pursued more wholeheartedly than any other by schools, the results have proved so elusive? A major survey of literacy and numeracy in Australia found that a substantial proportion of 14 year-olds were lacking in these skills (S. F. Bourke & J. P. Keeves (eds.), *Australian Studies in School Performance*, Vol. III. Canberra: AGPS, 1977, pp. 92-95). But of course, if we divorce these skills from the social experience of children, the skills will seem abstract and meaningless. I remember the headmaster of an inner-city school who had a pupil who was hopeless at mathematics, i.e., school mathematics. When the headmaster asked him the 'odds on' at the Saturday races and what he would win if he backed a particular horse, the kid could give him the answer instantaneously and he was always right. Often our view of the intellectual limitations of our charges is formed largely by the limitations of our own social experience. Schools often emphasise skills in an effort to escape the issue of values. We

can't. The traditional school stresses the learning of theories, facts and skills derived from long-established disciplines. The theories are made to appear as objective truth instead of what they are in fact — partial historical and pragmatic attempts by particular people trying to solve problems in particular situations at particular times. The facts are often presented as absolute, although all facts are partial and selective. The intellectual skills are often isolated and abstracted from life to such an extent that their pragmatic usefulness is not apparent and they are tied to a dominant, middle-class view of reality.

There is another approach to the task of providing the skills and knowledge needed for contributing to the workforce. That is 'recurrent education'. There has been a significant growth in in-service or 'on-the-job' training in Australia. This already represents a hidden educational system of unknown proportions. We don't know a great deal about the scope, variety and quality of this hidden system, but the *idea* represents a potential which could be developed further and which could serve to relate education to the changing realities of the working world. In addition, there has been a significant increase in non-credit extension courses offered by a wide range of community bodies, particularly in the management area, but also in the educational area for updating and retraining teachers at all levels.

These kinds of developments represent a rudimentary form of recurrent education — an idea dramatically different from the old, fourth-tunnel notion that you gave 'em their training early and long, and once and for all. We could, if we wished, reconstruct the education system so that the old idea of *preparatory* education was supplanted by the new idea of *recurrent education*. And we could make recurrent education *relevant* education by relating it more closely to the real world rather than locating it in ivory towers. We could also develop recurrent education in forms that are less bookish and more related to the experience of those outside the middle class.

To do this we would have to stretch our minds and our abilities. However, to do so would take us at least partway to meeting the challenge and opportunity of rapid technological innovation and class-biased education.

The Transition from School to Work

The school system acts in such a way that, by the time most young people enter the labour market, they have developed a view of themselves, a self-concept, which is 'realistic' in the sense that it correlates highly with the views of important adults with whom they are in contact, and that it also 'fits' with the obvious, traditional possibilities of the local labour market.

Consequently there is little confusion among most school-leavers as to the general level at which they seek employment. Three large, national surveys have found that working-class boys mainly seek apprenticeships and manual jobs and working-class girls seek jobs in shops and as secretaries. On the other hand, about 30 per cent of the sons and daughters of professionals and managers go on to university while the others mostly seek white-collar jobs. Most of those who make these choices remain at the same basic level

for the rest of their lives. The general level of job the individual enters after leaving school represents a ticket for life's journey. As we shall see later, this choice not only affects one's job chances but also one's life chances.

However the critical point in the transition from school to work is not the point of time "when the young person enters his first job, but the point of time when the job enters him" (M. Glickman, "Education and Work: an anthropological view of the transition process" — Chapter 3 *in* P. Brannen (ed.), *Entering the World of Work: Some Sociological Perspectives*. London: Dept. of Employment, HMSO, 1975, p. 43). For the middle-class adolescent this may be well before he even takes on his first job — if, for example, he has accepted his family's desire for him to enter law and is already a member of the school debating team and eagerly following his uncle's legal cases. For the working-class young man who has taken on a job as labourer in a steel mill, it may be five years after employment, when frustration and alienation have given way to passive acceptance that there is no way out or up.

Adjusting to Work

For the individual entering the world of work, the major aim is to 'find a good job'. So we may inquire, first, where are the desirable jobs? We are fortunate here in having a comparative Australian study to the "Work in America" study which represented a landmark in U.S. social research. The Australian counterpart was carried out by Fred Emery and Chris Phillips (Emery & Phillips, *Living at Work*. Canberra: AGPS, 1976). Emery and Phillips used their survey results, in part, to answer the question "Where are the good (i.e., the satisfying) jobs?" Their answer is that light and heavy industry offer the lowest chances for a high-quality job while education offers the highest. In education there are four high-quality jobs for every low-quality job, while in light industry there is only one high-quality job for every three low-quality jobs.

Emery and Phillips also asked "Who gets the high-quality jobs, regardless of where they exist?" The answer? Surprise! Surprise! The more education a person has the more likely he is to get a high quality job. In addition, if you have a higher occupational status, *not* surprisingly, you will receive the added bonus of better pay and conditions as well as higher-quality work.

For those who come from the more affluent segments of society, whose work pays adequately or handsomely, and whose work environment is satisfactory, the key issue in work becomes that of seeking and achieving job satisfaction. Increasingly this group expects work to pay well and expects good working conditions. Work then becomes an avenue for self-fulfilment. It is now clear what the characteristics of fulfilling or satisfying work are. A fulfilling job has the following characteristics:

1. variety;
2. autonomy;
3. responsibility;
4. meaning or social significance;

5. social support;
6. opportunity for learning new knowledge and skills;
7. opportunity for significant personal achievement;
8. a desirable future.

Traditional principles of work design produced jobs which had the opposite characteristics, i.e., narrow and repetitious, meaningless tasks; closely controlled from above; social isolated; limited learning and achievement opportunities; and often a 'dead-end' character as far as the future was concerned.

Those who are able to achieve satisfying jobs are able to use work to achieve more self-respect, to enhance and strengthen their self-concept. They are able to build on the base of self-respect first formed at home, and now confirmed and extended at work. They are the fortunate ones, and in Emery and Phillips' survey, they represent about 50 per cent of the working population (Fred Emery & Chris Phillips, *Living at Work*. Canberra: AGPS, 1976, p. 8).

But what of those individuals who get the *low*-quality jobs?

One might ask: Does it matter? Perhaps whether one has a high-quality job or not doesn't matter — there is still leisure time and family life for the disadvantaged worker.

We can dismiss that comforting thought, however, for Emery's study confirms findings from other countries that indicate that there is a close correlation between quality of work life and quality of life in general. Those who have low-quality jobs reported significantly lower levels of happiness and hopefulness and significantly higher levels of poor physical health. The objective quality of worklife was poorest among the unskilled and they were less happy, less hopeful and sicker than the skilled, who were in turn exceeded in happiness, hope and health by the professional group in the survey (Emery & Phillips, pp. 70-75). The stakes in the schooling race are now becoming apparent.

We have come a long way from schooling — but it is clear that the roads to this point are fairly clearly marked. Where a child is born in socio-economic terms strongly influences his chance of occupying a well-paid, satisfying, high-quality job and of achieving health, hope and happiness.

However we evaluate this, let us be under no misapprehension that this is the current shape of our social reality.

Schooling and work shape people — create their concepts of themselves and of their world — build self-esteem or lower it. One of the disturbing tables in the Emery and Phillips' study is the one showing the relationship between age and agreement with the statement "At work, I just do what I have to do." There is a steady and significant rise in agreement with this statement from those under 25 years to those 55+. Here we have substantial evidence that work in Australia progressively kills the initiative and independence of over a quarter of the workforce (Emery & Phillips, p. 48).

It is clear that, if we want to improve the life chances for those born into lower socio-economic strata, we need not only to change schooling but also to change the way work is organized for work has a profoundly educative effect.

This is most clearly so for those people in our society who are doubly disadvantaged. High on this list are minority ethnic groups.

Wild refers to the existence of an "ethnic underclass" at the bottom of the Australian social-class system (R. A. Wild, *Social Stratification in Australia*. Sydney: George Allen & Unwin, 1978, p. 63). As such, they occupy the lowest-paid, least desirable occupations and fill the ranks of those who are chronically unemployable. He points out that we have a long tradition of importing migrants for this position, from the Chinese and the Kanakas of last century, through the Greeks and Italians of the middle of this century, to the more recent Turks, and most recently of all, the Vietnamese.The ethnic underclass are unskilled, non-unionised, speak little or no English and live in cultural enclaves in restricted neighbourhoods. They are disproportionately represented below the poverty line (see R. F. Henderson, *First Main Report of the Australian Commission of Inquiry into Poverty*, Vol. I, Canberra: AGPS, 1975).

However they are not the only ones below the poverty line — they are joined there by the aged, single-parent families, sufferers of long-term illnesses and Aborigines (see Henderson, above).

The differences begin early. Ronald Taft has reviewed studies of migrant children in Australia and shows a substantial majority of them (three-quarters, in one study) were dissatisfied with their life in Australia and at school, while the vast majority (two-thirds) of Australian children were satisfied and none were dissatisfied (Ronald Taft, "Ethnic Groups", Chapter 7 *in* F. J. Hunt (ed.), *Socialisation in Australia*. Melbourne: Australia International Press & Publications, 1978, p. 104).

As these children move from school to work the outlooks of the disadvantaged groups amplify from discontent to despair.

Emery and Phillips (F. Emery & C. Phillips, *Living at Work*. Canberra: AGPS, 1976, pp. 55-62) note in their study that poor working conditions tend to go together, i.e., that low pay, low security, dirty, arduous and unsatisfying work tend to be characteristics of the same jobs. They further noted that those jobs are held by workers who share similar characteristics to one another. Emery and Phillips present a clear profile of the workers who get the poor jobs in our society. These workers represent about 10 per cent of the workforce and describe themselves as having "given up hope on both work and life".

They report, for example, that 66 per cent of migrant women from Southern Europe and non-European countries see themselves as having "no opportunities in life". (We should keep in mind that these were the relatively advantaged women migrants who were confident enough of their English to agree to be interviewed.)

As my colleague, Bill Ford, has pointed out in a number of publications, "Migrants and married women do work which Australian males no longer consider acceptable" (G. W. Ford, "Employment", Chapter 3 *in* A. F. Davies, S. Encel & M. J. Berry, *Australian Society: A Sociological Introduction*. Melbourne: Longman Cheshire, 1977, p. 63).

To be a woman in the workforce means that you have a high probability of being in a low-paid, low-skilled occupation (G. W. Ford *in* Davies *et al.*, as above, p. 59). To be a migrant means the same thing. To be a migrant woman, therefore, is to be doubly disadvantaged.

All of these problems come to a climax for the unemployed — the rejects from work in our society. Keith Windschuttle has recently published a penetrating review of unemployment in Australia (Keith Windschuttle, *Unemployment*. Penguin Books, Victoria, 1979). He points out that "in February 1978 the total number of unemployed Australians exceeded the total jobless in the Great Depression" (p. 9). His analysis shows that unemployment is intensively concentrated among young people, women, the least educated and the least skilled, recent immigrants and single persons.

I want to take one burden of responsibility from your shoulders. When we have any significant social problem emerging there are always those who want to blame the schools for it and who want the schools to solve it. I want to state that I don't believe schools originated these social problems and I don't think it is appropriate for us to expect schools to solve them. Nor do I think it is practical for schools to attempt to solve significant social problems. I see little evidence to suggest that the school system can act as the progressive vanguard for society. It would be a major achievement, I think, for the school system to catch up with and keep up with significant social changes.

Society's problems will not be solved in schools. They will be solved in society by facing social problems directly and that's where the solutions should be worked out. Education is not a substitute for economic and social reform. Major educational reforms are a natural outgrowth of social reforms and must parallel or follow them rather than lead.

If we take unemployment, for instance, there are many who say the schools should develop vocational skills in young people and train them in job-hunting. Some of this might be useful, but it would not solve the problem. The problem is that, given the existing structure of work in our society, *there are not enough jobs to go around*. No matter how well schools train young people to hunt for jobs and to hold them, many of them won't get jobs. I repeat: *there just aren't enough jobs to go around anymore*.

We might just as well ask the schools to train young people to hunt tigers and blame the schools when the kids come home without tiger skins over their shoulders.

Now there is a developing answer to this problem of job scarcity — and that is job-sharing. In fact, the problem is not lack of paid work but rather our fourth-tunnel notion that a job consists of something like 35 hours of work

per person per week. Already part-time work has been for some years the only significant category of work showing a substantial increase. During 1977, about one person in six in the workforce worked part-time. A recent publication *The Right to Share Work* (Future Lobby & the N.S.W. Association for Mental Health, 1978) argues persuasively for putting part-time work on as secure a footing as full-time work and creating more part-time jobs. In this way the available work could be shared more equitably among those who want paid work. There are other policies that could be adopted that would also be useful, such as early retirement, a shorter working week, paid education leave and so on. And in the meantime, we should strike medals for those who do not seek paid employment and who are prepared to exist at subsistence level — because it would cost those of us who do work infinitely more to create full-time jobs for those who currently don't have them.

I for one can't mourn the passing of many of the jobs in our society. I have worked in a factory and have trodden the floors of many more looking at people's work. I have also spent many, many hours looking at work in the clerical factories of our private-enterprise operations such as banks and insurance companies, and major government departments. Much of the work at lower levels is depressing, demoralising and degrading and provides no sense of dignity to those who do it. Let's leave it to the machines that do not have feelings and are not struggling to develop a sense of self-respect.

But what are schools to do until society works out a solution to the unemployment situation — a solution better than the current one of maintaining the affluence of parents at the expense of their children's futures?

One thing that must be done is to re-examine the priorities of the past and present. Over the post-War years the attention of educational planners and school principals focused to a large extent on expanding opportunities for the educational elite, i.e., those who have done well in the education system. The resources have been poured in particular into expanding further tertiary study.

But the majority of those who enter school are still emptied out at or before the end of secondary schooling. These are the youth most prone to unemployment and under-employment. To begin adult life in this way may create permanent harm to a large part of a whole generation. This group contains the young people of groups already disadvantaged in our society — non-English-speaking migrants, the poor, Aboriginals, women. The lack of attention given to designing an education appropriate to their needs and their life situation has bred frustration and hostility and resignation in these groups. To remove them from job opportunities puts them in a situation of double disadvantage. It is unjust. It is also socially dangerous to create a desperately deprived class in a highly affluent society.

At secondary and post-secondary-school level we must create provision for re-entry into formal education for those who did not continue and wish to do so. We must create novel programmes for those who have not even learned the basic skills of literacy.

And at the very least we must provide programmes for personal development and use of leisure for those who cannot obtain employment but who are trying desperately to maintain their self-respect.

We must realise that the expansion of higher education is just not working any longer. It is another fourth tunnel. It isn't even working for those who succeed in the system. We are now producing an oversupply of graduates — most are still finding jobs but they are finding jobs well below their expectations and displacing others down the line. And how well does a base-grade clerk work in the Public Service when he is a Ph.D. in Mathematics? We might remember that the urban guerillas of Europe are almost without exception young university graduates.

One important aim of education is preparation for work, i.e., for an occupation that will provide the individual with economic independence. This aim demands constant re-evaluation of the relevance of education, particularly when the workplace is changing so dramatically. But preparation for work cannot be allowed to dominate education. In particular in this current situation we have to do some solid rethinking of how to prepare and occupy a substantial proportion of school-leavers for several years, at least, of unemployment.

If, in the longer run, we share work out more equitably, then there will be still the issue of preparing the many for a creative use of leisure. This is a tremendous opportunity. Freed from the need to spend the major part of our lives earning a living, will we be prepared to unglue our eyes from the T.V., drop our 'tinnies' and our plastic foods and care enough for ourselves to allow our bodies to enjoy good food and exercise, our minds to seek some genuine creative satisfaction, our feelings to develop sustaining relationships and our selves to seek personal development; a sense of meaning and purpose to our lives? I believe that more Australians are moving in this direction and I have more hope than I had a few years ago that this can happen.

If we wish to improve the life chances of those who work, we need to initiate a large-scale social programme to improve the quality of working life. Such a policy has been advocated in a small but significant publication from the O.E.C.D. (Organisation for Economic Development), of which Australia is a member (*Education and Working Life in Modern Society*. Paris: O.E.C.D., 1975). Chaired by Clark Kerr, the committee responsible for this report has argued for what it calls "a positive policy for working life". This policy includes:

—enriching jobs;
—developing more flexibility of work and careers;
—providing more freedom in the organization of the working day and week;
—allowing greater participation in decision-making in industry; and
—ensuring that opportunities for employment and training are available on a more equitable basis (p. 13).

The report also argues for policies to help disadvantaged people which

—give them special assistance in gaining skills and finding employment;

—make available more opportunities for their development on the job; and

—provide better co-ordination between policies for employment security and for income maintenance (p. 15).

They also propose a wide range of new educational initiatives, centring particularly about adult education.

There *are* new options to be explored in constructing a more just and equitable society. We don't have to accept major and increasing injustices as part of the social order any more than those who refused to accept brutish child labour and slavery.

The final phase for the individual involves *Leaving Work*.

There has been a massive neglect in this country of the problems of retirement, reflecting our general neglect of, contempt for and embarrassment with the aged.

Emery and Phillips (pp. 56-57) provide some of the only relevant Australian material. They note that the highest proportion of women agreeing with the satement "Life offers no opportunities" was in their thirties, when their children move into adolescence. For men, however, the comparable peak was between 56 and 65, associated with facing personal retirement. While this may change in the future, given women's increasing commitment to a vocational role, it is men who experience a significant psychological shock on retirement from work and who often then die from transitional shock.

Of those who survive retirement, sometimes forced, premature retirement, once again the poor suffer more. Wild presents data showing that the lower-stratum aged are increasingly forced into ghettos, isolated from the rest of society and institutionalised. For carrying, over their lifetimes, the worst jobs in our society, their reward is to be thrown on the human scrapheap and allowed to die, lonely and neglected (R. A. Wild, *Social Stratification in Australia*. Sydney: George Allen & Unwin, 1978, pp. 158-72). For most of these people, schoolwork and a working life have carried them steadily downward into degradation and despair.

For the affluent, however, there is the opportunity to pursue leisure activities which maintain and strengthen the self. Travel, family and friends, clubs and associations, hobbies and so on allow those who have the resources to continue to learn and to grow.

Alternative Future Scenarios

I want to finish by describing two alternative future scenarios — two branching paths that our society can follow in the future. Which path we choose will have profound implications for the individual in the world of work in the future.

My first scenario I will call 'slow adhocery'. It is our traditional way of accommodating change in Australia and therefore the most likely way we will go unless we exert some effort. In this scenario we do not attempt to understand our current social situation in any depth nor search for new social options. All we do is to leave our current society, and the individual, exposed to a torrent of change. We continue to blame particular groups in our society for our social problems and to search for scapegoats to persecute — scapegoats such as 'Pommie shop stewards', 'capitalist exploiters', 'dole bludgers', and so on. We make slow, unrelated, unplanned and reactive adjustments as our existing social arrangements break down — and these adjustments are always too little, too late. The consequences of this scenario are increasing unemployment and underemployment; increasing social and economic disadvantage for groups already disadvantaged — groups such as migrants, youth, women, the disabled, Aborigines. We will see, consequently, the formation of two substructures of the 'haves' and the 'have-nots'; political polarization and reinforcement of extreme Right-wing and Left-wing dissident antidemocratic forces. There will also be continued rising crime rates and planned violence.

My second and alternative scenario I will call 'systematic social innovation'. In this scenario we try to understand where we are at in serious terms. We foster public debate of new social options that provide opportunities for the acquisition of work, assets, status and personal fulfilment in Australian society. In particular we seek to explore some of the following promising options:

(a) the redistribution of work through such measures as permanent part-time work, job-sharing, flexible working hours, early retirement, new arrangements for vocational training while at work;

(b) the development of opportunities for the disadvantaged such as outreach and self-help programmes to provide realistic opportunities for them to enter the working world;

(c) increasing job mobility by means such as portability of superannuation, opportunities for on-the-job training and retraining, and manpower planning;

(d) lifelong recurrent education to provide opportunities for re-entry to work. This would involve restructuring the traditional relationships between education, work and leisure and, in particular, substantial modification of existing preparatory schooling systems;

(e) redesign of organizations to make them more flexible and adaptable. In particular this means reducing organizational hierarchies to form 'flatter' organizations, changing management style from authoritarian to more participative, introducing systems of employee participation in decision-making, or 'industrial democracy';

(f) redesigning work to eliminate substandard, exploitative jobs and redesigning work and the work environment to improve the quality of working life;

(g) developing initiating rather than reactive governmental planning that provides leadership in pursuing social policies of the kinds described above.

This latter scenario is, of course, more difficult. But it does offer, in the longer run, some hope for creating a society equipped to cope constructively with change — a world where even the disadvantaged individual has some chance to find work suited to his abilities and to acquire the resources and experiences he needs to maintain self-respect and hope.

Or we can go back to the first scenario with a shrug and that old Australian throw-away line "She'll be right, mate!"

Which path will we choose?

DISCUSSION

Selected Comments

Professor Dunphy

On the question of public debate, which I gather is the first question — how do we stimulate this kind of public debate? I think the kind of thing that we're doing here is a perfectly good example of that, and I think there should be a great deal more of it. The kind of model I think is appropriate, if you want to extend that onto a larger scale, is the European model, and I don't simply mean the German model, although I think we can learn a lot from that. I mean generally the Northern European model of conducting social debate. I think it's very hard for us in Australia to appreciate the extent and the amount of organization and social resources that have been put into this kind of debate in Northern Europe. There are, no doubt, historical reasons for this: the impact of the war and the almost total destruction of the social fabric in Europe in the Second World War created a crisis situation to which those societies felt they must respond. As a result of that crisis — partly, in the case of Germany, with prompting from the Allied occupiers — a whole variety of social innovations was created, such as tri-partite committees that negotiated their way over a number of years through extreme changes in a number of areas. For example, Sweden, which pre-war had a worse industrial record than Australia, negotiated its way through to large-scale industrial peace and significant social innovation over a number of years through sheer drudgery, hard work and patience, with representatives of employers, trade unions and the government sitting down and considering social issue after social issue.

That was not just done at a supreme level nor was it done by the tired old work hacks that we tend to put on tri-partite committees — the Bob Hawkes and others who half the time don't turn up because they're too busy doing other things. There was a much more widespread use of significant people in those areas; the debates were much more real and public debate was enjoined. In Northern European countries large sections of the work force are drawn into the debate in a highly organized manner; this happens right down to company level, government department level and so on. Now I suspect that in Australia we simply are not aware that this kind of social engineering or social innovation has gone on. We are quick to grasp at new technologies that come from overseas, but we seldom realize that those technologies are supported in their countries of origin by at least the same level of social innovation. We simply take the technology out of social context and ignore the social innovations that support the technology. We are suffering dramatically as a result. I hope that answers the public debate question.

On equality for minorities, I think this is an extremely difficult issue. I don't believe we have the answers — maybe there are no answers in the absolute sense to the problem of reducing these social inequalities. One

major problem that has arisen overseas, where the efforts that have been made are on a larger scale than they are here, is that whenever you produce a new outreach programme or a new television programme like "Sesame Street" and so on, the middle class make much better use of it than the working-class, and so they simply entrench their interests even further. Some of you may think that I'm a dangerous radical in making the kind of social analysis I did earlier. Even before I gave the paper I was criticized by one person who had read it beforehand for overemphasizing social class. I don't believe I'm a radical; I work consistently with senior managers in both the public and private sectors and a lot of conservative types of institutions; and I believe that if we're going to build a successful economy in this country we must make use of the resources we have available to us. We must preserve the best we have in our society, and I believe that we have in our society very significant values that are not true of many others. In that sense, therefore, I'm a conservative, but I believe we will only preserve what is best by changing our society in response to the other kinds of changes in it. I also believe that the rate of that change is now so fast that we cannot simply depend on the slow process of adjustment that has served us well in the past. There is a lot to be said for *ad hocery* in a period of slow change, and Australians became experts at it. It did us fairly well for a number of years; but the pace of change is so fast now that we must, in fact, begin to plan ahead, and the process is more difficult than it ever was before.

All I talk about these days, I guess, is exploring social options. I don't believe we can simply adopt the answers that have been found to work overseas, or assume that because some answers have been found not to work overseas, that they won't work in Australia.

Mr. Costello

I think that the building of consensus and the building of social change have to arise out of some general agreement about what the rules of the game are and that the society is generally interested in being fair to all its citizens. I referred this morning to the sort of thing "Australia Ripped Off" published, not because I necessarily wanted to say I believe it or endorse it — although I think by and large that it is true — but so that people might understand that there are quite other views about how fair and reasonable and decent our social system is. This seems important to me in terms of the sort of consensus that may be necessary, or that we may want to seek, if we are to avoid the problems that appear to be rushing upon us. There needs to be some general agreement that the economic and social processes and systems have to work for everybody. Now, how do schools fit into that? Well, it seems to me that schools have to fit in if we are true to our role as educators by having some regard to questions that are difficult and fundamental, and not shying away from analysing the nature of our society and seeing who wins and who loses in it. We don't shy away from political questions because they are political — we don't have to deal with them in a partisan way. We must in some way overcome the notion that we should anaesthetize the school system so that it appears non-

controversial and dealing with facts and techniques and literacy and numeracy and those sorts of things. I know that's really not much help but it's my immediate response to what are very profoundly difficult questions.

Professor Strauss

I don't believe that there are many fourth generation welfare recipients, I think that's partly a myth, at least in some societies. Nor do I believe that many of them desire to produce fifth generation welfare recipients. I think that most people want to get off the welfare roles, and I think among the more promising experiments have been those with various sorts of sheltered workshops in which groups of disadvantaged people are put to work on jobs. These are disadvantaged youths, older men and women, and even, in the U.S., drug addicts. These people are not isolated from others of their type, but put on half-wage jobs, working for various government agencies — in some cases for companies — in which there are other people with the same background, learning how to work, getting the experience of doing something creative, earning an income, and receiving training on the job. Ultimately they are moved out of the sheltered environment into the full-time work place. With Ford Foundation support, the U.S. is now in its sixth year of a rather large experimental approach based on this principle, and it seems to be working much better than almost all of our previous poverty programmes. In other words, it means that people who come from a culture in which their peers and parents have not had full-time, worthwhile jobs and who still are not convinced that hard work will pay off are given an opportunity to have worthwhile jobs, to be paid worthwhile salaries — at first in a protected environment and then ultimately in the main stream. This is always provided, of course, there are jobs for them to move into. Many of the American poverty programmes have trained people for non-existent jobs, resulting in greater frustration than ever before. Also many of the early American poverty programmes sent children and young adults who had been failures at school back to school where they were failures once more. I think these groups in particular need some immediate sense that what they're doing pays off. For the middle class kid it's enough to say, "10 years from now, you'll be a doctor. Work hard."

For those from environments where they don't readily see that working for 10 years pays off, you have to provide an immediate payoff. In so far as there is an answer, this may be it.

EDUCATION AND THE WORLD OF WORK

I. W. TAYLOR

Preamble

Well-fed administrators meeting in a country house to discuss the amelioration of poverty. Concerned white social workers gathering in a town hall to grapple with the problems of multi-racial living; educationists spending part of their vacation holed up in a hotel to talk about the problems of *work*.

And why not? Heaven protect us from that sentimental trendiness that weighs arguments according to the economic situation of the speaker, the worth of his or her remarks being judged in inverse ratio to material prosperity. And yet . . . read Studs Terkel and (if you like) Zola in the course of trying to set down some thoughts about education and work and it is difficult to escape a sense of inauthenticity.

For the fact is surely that few of us here have any real experience of the world of work as it concerns the majority of mankind. By the standards of millions of our fellow men and women, whose collective action can now have far reaching economic, social and political effects, many of us do not really know what 'work' is. Manifestly this is not going to get in the way of our continuing to talk about the subject. Nor, if we occupy positions of power and influence, will it or should it stop our continuing to legislate and administrate on behalf of our fellow citizens. We don't argue that only those with experience of parenthood should be allowed to teach young children, or that priests should not advise us on sexual matters, or even that professors of education should have taught school. "Knowing how" and "knowing that" *can* be distinguished. The ability to do something well does not always carry with it the capacity to articulate and communicate to others the knowledge and skill involved. But I have a nagging feeling that some kinds of work are of such significance in shaping a person's image of him/herself and the world as to make for real difficulties for a non-participant in vicariously, without first-hand experience, understanding and appreciating what it means, for example, to be governed by the pace of a machine, or to be subject to constant supervision and intervention, or engaged in difficult choices and decision-making, or concerned with the manipulation of abstract ideas.

The reasons that so much has been written by intellectuals about culture and about teaching by educationalists, and about the theatre by actors and about writing by authors are all obvious enough. Just so is the fact that so little has been written by factory operatives about machine-minding, about hotels by chamber maids, and about agriculture by farm labourers. (What little *has* been produced by such people is readily encapsulated and given cult status. And if the subject is visual enough, it is turned into a television series.)

So this nagging sense of inauthenticity has to be registered. On the assumption that many of us are likely to feel a twinge of it from time to time (although not strongly enough to spoil the enjoyment of a week or

so in the Sheraton), this word by way of preface may be a useful corrective to some of the more pompous things that we, whose first-hand knowledge is for the most part limited to a few of the climatically favoured high technology enclaves, are likely to say about the relations of education and a world of work.

But enough of that. A paper prepared for a conference of educationalists is not a sermon. Neither is it a chapter in a book. The purpose of commissioning and distributing a paper of this kind is presumably to provide a resource for face-to-face discussion and debate. Any value that comes from subsequent publication is — or should be — secondary to this purpose.

If this is accepted, the structure and the content of the paper should be related to the uses that conference participants are likely to make of it, and to the place that discussion of the topic concerned has within the proceedings as a whole.

The title of the session to which this paper is a contribution is the same as that of the conference itself — Education and the World of Work. It can be assumed that, by its last full day, the conference will already have identified and considered many of the strands that enter into a consideration of this theme. My purpose, as I conceive it, is to provide a framework in which these strands might be drawn together to facilitate the identification of future study and action. I shall do this with reference to the international scene, leaving to Professor Musgrave the task of developing specifically Australian applications.

Education or Schooling? Employment or Work?

By now it will be clear that education and work are both problematic terms. There was a time, perhaps, when the separation between them caused few conceptual and definitional problems. Education took place in schools and colleges and universities. Work was done in fields and factories and offices. The one preceded and was to a greater or lesser extent a preparation for the other.

Although important elements of these distinctions remain, commonly understood boundaries between education and work have been broken in several places.

Education is no longer simply identified with schooling; a particular process undertaken in a particular institutional setting during a particular period of life. If we leave aside the analytically useless sense in which *any* experience can be regarded as "educational", and disregard the arguments of those who would draw a clear and significant distinction between education and training, we are left with a vast number of more or less formally "educational" activities that go on outside and beyond the school and higher education. With this goes a growing press towards concepts of lifelong education, recurrent education and *education permanente*, the rallying cries of much educational discourse sponsored by UNESCO, OECD and the Council of Europe respectively. We also have a considerable literature which examines and aligns the values and practices of school and of work place, which stresses

the *correspondence* between the skills and dispositions that each requires within the social and economic structures in which they coexist.

Efforts to refine the concept of *work* abound. Historical analyses highlight the temporality and distinctiveness of definitions based upon largely industrial models (Anthony 1977). Some authors, aided and abetted by those who fear the consequences of micro-electronics on the job market, argue for a further distinction between *work* and *employment*. We all need work; we may not all be able to have continuous employment.

Not only conceptually, but also practically the boundaries are less clear than once they were. Some courses of higher education are organized on the sandwich principle with a period of paid employment seen as an integral part of the educational programme (the term for this in the United States is "co-operative education"). Work experience is being introduced into secondary education. Paid educational leave for workers is a legal right in several European countries. And the leaders of nations undergoing revolutionary change give high priority to reassessing the relations of education and work, sometimes to the point of seeking to destroy the institutional frameworks within which they have been carried on in pre-revolutionary conditions.

Boundaries are also being eroded elsewhere. While the bulk of existing educational provision — basic or primary, secondary and even much post-secondary in the developed world — falls within the welfare function of governments and is financed through the tax system, there is also in nearly all countries a "private" sector, both general and vocational, which is subject to the market. Contrariwise, while most job opportunities in democratic capitalist countries arise from the operation of markets, there is a growing sphere of welfare-generated employment, supported through the tax system. Here again, the boundaries between education and work are no longer clear.

Yet important distinctions remain. Most people continue to make a common-sense separation between activities and processes that are primarily educative in design and intent and those which are primarily productive. Work is still generally defined in terms of job employment, distinguished by time and space constraints and structures of rewards from non-work and leisure. Education is still for most people something that begins in schools at age five or six and that, at least on a full-time basis, ends at 16. Despite the reforming intentions of many of those who discuss the relations between *education* and *work*, most of the literature on which they draw is in fact about the relations between *schooling* and *employment*.

There are also differences between the organization and imperatives of the education and work systems, to which OECD have drawn attention in a recent statement.

> . . . these systems have quite different structures, function differently, and are affected by policies formulated through different processes. Education is predominantly a public service, created and made available through large administrative systems in which policy is implemented by the public authorities in the light of broad political judgements and decisions reflecting the needs and wishes of the community and electorate.

> In contrast, working life has its place within economies that combine in varying degrees the management and free operation of the market for goods and services, in which employment is heavily dependent on production and investment and on decisions by enterprises and workers' organisations that may be outside the scope of public policy. An awareness of the extent to which education and working life operate within different systems therefore becomes particularly important when considering co-ordination not only among government departments and among the various levels of government but also between the policies of governments and those of enterprises and workers' representatives. (p. 48).

Thus, while *policies* are now oriented firmly towards closing the gaps between education and work, towards modifying individual consciousness of the differences between them, towards making schooling "relevant" to adult life, and work experience "educative" rather than alienating and degrading, the *conceptual* and *organizational* apparatus with which we work still emphasizes the separation of the two spheres. This is a state of affairs which makes for real difficulty in discussing some of the problems that at present face governments and decision-makers in our various countries. It is an issue to which I shall want to return.

The Agenda of Education/Work Relations

For the moment, however, let me bracket these conceptual difficulties, and try to identify some of the tasks and problems that characterize our contemporary discourse about education and the world of work in developed countries. We all like lists; they give a sense of order and purpose to a life-world that otherwise threatens to become inchoate and bereft of meaning. There is even a book of them that achieved number one best-seller status. To list the problems may be a first step, but some of us never get beyond it. Lists are no substitute for understanding and explanation based upon fruitful theorizing, and for clear-headed programmes of action. But let us not despise them entirely. They signal the intentions of our journey, even if it is never completed.

In the literature about the relations of education and the world of work in developed countries, there are, it seems to me, a dozen or so problems that stand out. I cannot hope to deal with all of them in what follows. Let me simply at this stage note what they are:

(a) The fact that conferences all over Europe, the United States and the Pacific region have taken this topic as their theme reflects the concern which unemployment, and particularly youth unemployment, arising from the current world recession is causing for governments and administrators.

(b) Coupled with this anxiety is an awareness that even if favourable economic conditions return, unemployment may persist as a consequence of large scale technological change.

(c) Worries about the personal and social consequences of disaffected and rootless youth have been around for a long time. They have been exacerbated by the tendency for unemployment to be greatest amongst the least qualified.

(d) Despite unemployment, shortages of many kinds of skilled manpower remain, and inhibit the response that labour systems can make to changed economic circumstances. Against conservative anxieties about an over-supply of the highly educated, it is argued that over-qualification has less undesirable social effects than under-qualification. In the words of one of your own speakers on an earlier occasion ". . . basically, we are convinced that a carpenter journeyman is better off on the labour market, even if there is a surplus of carpenters, than if he were unskilled." (Jochimsen, 1978, p. 35). However, against this, Anderson (1977) states 'I would today defend the unduly simplified assertion that I wrote in 1967: "It is not necessarily true that training in one skill is always better than no specialized training at all".'*

(e) Welfare policies and labour market trends are not always compatible. The growing proportion of women in the labour force diminishes job mobility. Steps to encourage mobility may inhibit efforts to improve levels of investment in training. Employee protection legislation may conceal inefficiency.

(f) What may be called the "signalling system", which on the individual level involves knowledge about job opportunities and at the *system* level has to do with the way in which schools, teachers and curricula are adapted in response to present and prospective labour market trends, is widely recognized as deficient.

(g) Despite the rhetoric of one world and of a new economic order, and the real efforts being made by groups of sovereign states to act in concert, the uncertainties and competitiveness of the international economy dictate policies geared primarily to national survival. Governments place a consequential responsibility upon educational systems to help sharpen the competitive edge of the economies concerned.

(h) Economic perturbation, technological innovation and social change create both uncertainty and inconsistent expectations about the skills, the knowledge and the dispositions needed by school leavers. Educators are urged to devise instructional systems that will maximize performance along diverse, and sometimes conflicting, dimensions.

*And goes on to say that "Effective utilization of school graduates contributes more to productivity than does fine-tuned training. As one can say generally about the benefits from schools to a society, outcomes depend more on how society makes use of its educated youth than upon wise choice of content in their lessons. This way of looking at the orientation of schooling to lifetime activities is a corollary to the earlier caution about estimation of job requirements. It is another way of saying that the skills of workers reshape the occupations in which they are used. And how they are used calls for at least as much adaptability by employers as by teachers" (Ibid p. 45).

(i) On-going and contemplated reforms of the school system (e.g. the replacement of a bi-partite or tri-partite secondary structure by comprehensive schools) has altered what in most countries has for long been a tightly geared relationship between type of secondary education, terminal qualifications, initial employment and subsequent career prospects. Particular attention is currently focused on the nature of the credentialling and the certifying system that is appropriate to a reformed pattern of secondary education. In the words of an OECD report, "the disillusion which is felt today by many leavers from all branches of education is mainly due to the fact that the accepted relationship of level of education and level of job has become much looser. The "implicit contract" is being broken and the guarantee provided by credentials in times of scarcity of education is no longer valid." (OECD 1976 p. 3).

(j) Enhanced quality of life expectations, and the problem of "ungovernability" that arises from what are seen as the denial of entitlements, has emphasized the role of the school as an agent of political socialization, especially in relation to subsequent democratic participation, both as citizen and in the work place.

(k) A combination in many countries of demographic down-turn and economic recession has inhibited attempts to institutionalize innovation by the introduction of new educational structures. The implementation of reform increasingly depends upon the modification of existing structures, a much more difficult and time-consuming process than that of creating new types of schools, colleges and courses.

(l) Closely linked to the foregoing, with both short and long term practical implications of which governments and enterprises are becoming more and more aware, is the academic debate about the social and technical conditions that influence job satisfaction, and the part that education might play in reforming the individual's response to work. There are questions to explore about the kinds of work organization that generate Blauner's (1964) four kinds of alienation — powerlessness, meaninglessness, isolation and self-estrangement — and those that protect against these feelings; there are issues to discuss concerning the nature of satisfaction as a ratio of expectation and experience; the model of man that most forms of industrial organization assume or promote; the extent to which the self-actualization needs that arise once basic physical necessities have been met are moulded by the media; the relationship of morale and output in relation to schemes of job-enlargement and job-enrichment, and a host of other problems that arise from study of the socio-technical environment of work. For others, such study merely props up an industrial system that already shows signs of outrunning its course. Education should reinforce the individual's resistance to the dehumanizing character of work in capitalist society, by educating *against* industry. (Edgley 1978). The forecasts of the 'limits to growth' school provide empirical support for the neo-Romantic

anti-technology notions of a proportion of middle class youth, whose own experience has been largely outside the realm of necessity to which even Marx drew attention.*

In the mid-sixties, Galbraith (1967) suggested that 'The question remains as to how closely the educational and scientific estate, which owes its modern expansion and eminence to the requirements of the industrial system, will identify itself with the goals of the latter'. (p. 293). For many, this remains a question to which an answer has not been yet provided.

I need hardly underline the problems of epistemic management to which the above — and the list is by no means complete — give rise. There is thus a growing interest in concepts, classificatory schema and theories which promise to make all this perceptual and experiential overload manageable. Within government itself, there is a desire to design planning and implementation systems that not only command high legitimacy, and operate effectively and economically, but which also bring together knowledge and ideas drawn from a broader spectrum of intellectual disciplines than hitherto.

The Response to Unemployment

The stream of transfers between full-time schooling and paid employment is widest at the end of the period of compulsory education, which in most developed countries is now sixteen. In England and Wales, for example, two-thirds of all pupils leave school at this stage; the great majority immediately seek employment. For many this is becoming increasingly difficult to find. The percentages of youth unemployment in a number of OECD countries in 1976 are shown in the following table. (OECD 1977b.) The basis of comparison is inexact, as the definition of what constitutes 'youth' varies somewhat from one country to another.

Australia	9.0
Canada	12.5
Germany	5.2
Japan	3.1
Sweden	3.6
United Kingdom	13.1
United States	14.0

It needs to be emphasized that the definition of what constitutes 'unemployment' is itself by no means unproblematic. Reviewing the substantial literature on this topic, Parr (1978) identifies four sources of *under-estimation* — failure to register, under-utilization, voluntary unemployment and the effect of short term job-creation schemes — and another four that may lead to *over-estimation* — fraudulent registration, the already retired, people between jobs, and the registered and unregistered disabled.

*"Just as the savage must wrestle with Nature in order to satisfy his wants, to maintain and reproduce his life, so must civilized man, and he must do it in all forms of society and under any possible mode of production." Marx K *Capital Vol. III* p. 874.

90

An OECD survey of youth employment undertaken during 1977 suggested that even on the most optimistic economic forecast, it was unlikely that any real improvement would take place before 1982. It was more possible that 'excessive' rates of youth unemployment would continue for another ten years (OECD 1977c). The incidence of youth unemployment is particularly marked in the case of the least well qualified, immigrants and minority groups. In Northern Ireland, for example, the overall unemployment rate for Catholics in 1971 was 13.9 per cent, compared with 5.6 per cent for Protestants. (Central Statistical Office (1979) p. 89).

There are substantial differences between countries in the kinds of activity to which young people go on leaving school. For example, in Germany in 1976 nearly 49 per cent continued in full-time general or vocational education, a further 46 per cent took up apprenticeships, and only 6 per cent were registered as being in other kinds of work, unemployed or "unknown". By contrast, figures for Australia indicate that under a quarter of young people leaving compulsory school went into full-time general or vocational education, 15 per cent took up apprenticeships, and nearly two-thirds went into other kinds of work (or were unemployed or in the "unknown" category). The figures in each category for England and Wales are of similar magnitude to those for Australia, while in France, nearly two-thirds of the leavers come into the full-time general and vocational education group, just over 12 per cent in apprenticeships and under a quarter in work, unemployment or "unknown". (OECD 1977d p. 5).

There are several reasons why youth unemployment is running at even higher rates than unemployment overall. Over the past decade or so, wage differentials between workers of different ages have in many countries been eroded. High wages and low productivity make young people a bad bargain for employers. In times of uncertainty and diminished profitability, the investment element in training a younger employee is more difficult to justify. On the supply side, it is frequently alleged by employers that new recruits lack the dispositions and skills that would make them useful workers. Young people themselves are more selective, less willing to accept a vacancy that does not appeal to them, better able to survive on the unemployment benefit payable as part of a developed system of transfer payments, supplemented by the incomes of other employed members of their families. This last is likely to be particularly important in countries such as the United Kingdom, which have a high proportion of women in the labour force. Between the early fifties and 1976 the economic activity rates of females more than doubled (Central Statistical Office 1979 p. 84).

There is still a strong tendency in official statements and in published statistics to assume the abnormality of unemployment in general and youth unemployment in particular. Full employment throughout the working-life span that extends from 16 to 60 or 65 is assumed, at least for males. Four-fifths of all men in the UK, and just under a half of all women, are in some kind of employment. For the 25 to 44 age group the percentages of those employed or actively seeking work are 97.9 for men and 56.3 for women.

The proportions of each age group that are economically active acquire particular importance in relation to the age-structure of the society. A country with a small number of old people is better able to afford early retirement schemes. As far as Europe is concerned, the proportion of dependants — those below 15 and those above 60/65 — will fall for the next fifteen years or so and then begin to rise. While the figures vary somewhat between countries, most workers in Europe have to support between one and one-and-a-half other people besides themselves. (Rothman 1978.)

Despite all the anxiety about wasted talents generated by talk of graduate unemployment, it is among those with the least schooling that youth unemployment is most marked. (OECD 1977b p. 78.) Although employment remains the norm, a recognition that problems of youth unemployment will not go away in a hurry, and anxiety about the social and even political consequences of having large numbers of young people on the streets with nothing to do, has in several countries led to the establishment of special agencies charged with the task of providing youth with marketable skills and ameliorating the personal and social consequences of prolonged or intermittent unemployment. It is not without interest that in many cases such agencies function outside the formal framework of educational provisions. Hill (1978) has suggested that the reasons for creating special agencies are threefold:

(a) To create a separate and accountable 'management system';
(b) To reduce potential interference;
(c) To provide for direct representation of special interests.

In the United Kingdom, the Manpower Services Agency with its Youth Opportunities Scheme (YOS), and Training Services Agency operate separately from the Department of Education and Science. Similar arrangements exist in Canada and in Australia. But the major reason for such efforts being mounted outside departments of education is that such departments are subject to provincial, state or local control that makes for difficulties in the application for a national manpower policy. Furthermore, in the U.K. the block grant system of funding local authorities means tha Central Government has no guarantee that funds made available for the support of particular kinds of activities will be used in the ways intended.

Unemployment has highlighted the problem of what in the United Kingdom Her Majesty's Inspectorate have called "non-participant 16 to 19 year olds". As a result of a Joint Study by the Department of Employment and the Department of Education and Science, programmes of Unified Vocational Training have been devised. It is intended that such programmes of further education and training for young people should

(i) be demonstrably relevant to their immediate situation as present and future young workers or students,
(ii) motivate them to improve and extend the skills and areas of knowledge which are the basis of present and possible future performance,
(iii) improve, extend and diversify their capacity to communicate and be communicated with,

(iv) enhance their understanding of the economic, political, social and environmental factors which effect their lives,

(v) improve their powers of appraisal and discrimination and their capacity to apply their knowledge and skill to the solution of practical and personal problems,

(vi) so assist the process of self-discovery as to help them to make informed first career choice or to find new directions,

(vii) encourage greater sensitivity and responsibility in their personal relationships with their elders, contemporaries, juniors and the opposite sex,

(viii) help them to discover and develop their powers of creativity and initiative whether at work or at leisure,

(ix) offer them learning experience which are helpful in mitigating past or present disadvantage, whether it be social, economic, physical or educational disadvantage.

(Department of Education and Science 1976 p. 4).

As in several countries where efforts are being made to cope with the problems of the young unemployed, arrangements in the United Kingdom have tended to be diverse as to origin and purpose, piecemeal in approach, somewhat unco-ordinated in application and without systematic evaluation.

In this context, the report *Young People and Work*, prepared by a Committee set up by the Manpower Services Commission (1977) under the Chairmanship of Mr. Geoffrey Holland, was noteworthy for two things.

First, it acknowledged that, although the causes of youth unemployment are complex and not yet fully understood, the phenomenon itself would be unlikely to disappear in the easily foreseeable future.

Second, it made a number of radical proposals for bringing together the various schemes that had appeared in response to youth unemployment within a "single coherent programme comprehensive in its coverage and responsive to the differing needs of unemployed young people in different parts of the country" (p. 33). Financial inducements were proposed to encourage young people to participate in training and work experience programmes, but the principle was clearly enunciated that "the programme as a whole must not be more financially attractive than being in full-time work or damage the incentive to young people in full-time education to continue their courses" (p. 9). Broadly speaking, the Holland Committee recommended that three kinds of courses be designed to prepare young people for work — assessment or employment induction courses, short industrial courses, and remedial or preparatory courses. Four different kinds of working experience were also recommended. These included work experience on the employer's premises, project-based work experience, training workshops, and community service.

In the present context, the results of surveys carried out by the Commission among employers, the young employed and the young unemployed, and summarised in the report, are of particular interest. The main features of these findings were these.

(a) Employers felt that the calibre of young employees had deteriorated during the preceding five-year period, both in respect of basic education and motivation. It was felt that recruits to skilled manual jobs were particularly deficient in these respects. About half the employers included in the survey aligned themselves with this point of view.

(b) But the *practices* and *politics* of employers seemed to belie these attitudes. Most of them were reported as expecting to continue to employ about the same proportion of young people in the future as in the recent past.

(c) Only in respect of certain skilled jobs requiring lengthy training can it be said that a "young people's job market", distinct from that of older workers, actually exists. It seems clear that the bulk of young people are in direct competition with their elders for employment. This has particular implications at a time when wages differentials between age groups have narrowed, and the market for labour is depressed.

(d) Just as employers felt that motivation and basic skills had deteriorated over the past five years, so they wished for a "greater willingness and better attitude to work" (p. 17) from young people. Inadequacies in respect of personality, attitude, appearance and manners, as well as in the "3 R's" were matters for frequent comment.

(e) It is an error to believe that a substantial proportion of unemployed young people are no longer interested in obtaining work. Most were actively seeking jobs. Very few had refused offers.

(f) Unemployment was more common, and lasted longer, in the case of young people without qualifications. As we have seen, despite all the anxiety that has been expressed in recent years about graduate unemployment, there is a positive correlation between credentials and the ability to obtain work.

(g) Many of the young people out of work came from families where a father, mother, brother or sister was also unemployed.

(h) Most of those interviewed were perfectly willing to return to full-time education if this would result in their obtaining a qualification which led to employment.

Following the publication of the Holland Report, and of the Department of Education and Science's Consultative Document *Education in Schools* (1977) there has been a great deal of activity in the United Kingdom in the provision of vocational preparation, post-school education and training and special programmes for the young unemployed. The basis for Unified Vocational Preparation (UVP), which aims to cater for the 40 per cent of the school leavers for whom apprenticeship and other forms of training is not available, was laid down in a Government Statement *Unified Vocational Preparation, a Pilot Approach* issued in March 1976, and 'schemes' (it is emphasized that UVP is not a traditional course, but a coherent scheme designed to meet the needs of school leavers as these present themselves in a specified neighbourhood and industrial context) have since been developed

in a large number of Further Education Colleges. (160 schemes were operating in 1978/79). The pedagogy of UVP is of particular interest in relation to the fact that many of the young people concerned will already have rejected 'schooling' and all that goes with it. There has thus been an attempt (not always successful) to get away from traditionally rather structured teaching methods characteristic of Further Education, and instead to implement an approach.

> . . . (that) starts from the experience of young people, experience undergone fortuitously or organized as part of the programme. It then depends upon the young person identifying and accepting a need to learn. Variations of this process are described variously by UVP tutors as 'problem solving', 'participative learning', 'task or student centred learning', etc. . . .
>
> (FE Curriculum Review and Development Unit 1978 p. 19.)

Needless to say, there have been problems. A Department of Education and Science and Department of Employment discussion document issued in April 1979 suggests that many employers 'remain unconvinced of the basic diagnosis and consider that there is no real problem for UVP to solve'. (p.17). Such employers see vocational preparation as the task of schools, are unhappy about releasing young employees for training that many of the young men and women themselves say they do not want, and believe that if there is a need, it can be met by on-the-job training provided by the firm. At the FE College end, the skills to implement a pedagogy such as that outlined above are in short supply, and the salary premium associated with more advanced work provides little encouragement for staff to involve themselves in activities at this level. It is now proposed that, in addition to continued development of vocational training for all 16 to 18 year olds, a system of 'traineeships' will be introduced, of three to six months duration, as 'an integrated programme of education and training both on and off the job, combining elements of induction, basic job skills and knowledge, and social and life skills. A certificate recording the content and coverage of the programme would be issued on completion of the traineeship' (DES and DOE 1979 p. 2).

Another major line of development has been the Youth Opportunities Programme (YOP) directed at the young unemployed and intended to strengthen their position *vis-a-vis* the job market.

While it is not the purpose of a paper of this kind to examine in any depth the *causes* of youth unemployment, important educational implications do flow from whether or not we believe that unemployment is short term and cyclical in nature, or whether it has structural features that are likely to endure or become even more marked in the decades ahead. The educational strategies appropriate to a situation of cyclical unemployment may be totally inappropriate if the causes are structural.

The social, political, and educational stakes are much higher in the case of structural than of cyclical unemployment. To deal with the latter does not demand that we re-think many of our ideas, re-assess our values or re-structure our institutions. To be sure, we have to do better in finding ways

to motivate young people for education and training who are at present either involved or persistent truants before the age of 16 and frequently unemployed after it. We have to identify the kinds of skill and knowledge likely to be needed, and provide relevant and effective preparation. We have to improve the flow of information between education and the labour market, ensuring that young people receive the best possible advice about the occupations open to particular levels of performance and qualification, and helping industry and commerce to make the best possible use of the talents of their employees. All this is difficult enough, and although progress is being made, it is by no means rapid or universal.

But if the prospect is one of long-term, structural unemployment, in which a high proportion of both young people and adults can expect to be without paid work for shorter or longer periods throughout their post-school lives, then the educator's task is a daunting one. It is unlikely that it can be accomplished by readjustments of a kind that have so far been proposed, e.g. earlier retirement, paid educational leave, work sharing and the abolition of overtime. It is easy enough to embrace these as principles, much more difficult to handle the problems of their implementation.

Some of the most enthusiastic advocates of such reform give the impression of being incapable of managing an icecream barrow, let alone the employment of problems of a large staff. Yet what they advocate is still at the easy end of the market. It involves no radical reformulation of the work ethic, no reconciliation of such a reformed ethic with the structures of merit and reward with which several hundred years of trade and urban living and industrialization have made us familiar, no re-assessment of personal identities other than in terms of income and occupational status, none of the really difficult things that may have to be tackled if long-term structural unemployment is to be tolerable and tolerated within a social and economic system that remains, in large part at least, based on the market and allows freedom of expression and personal mobility to its members. And when some of our more enthusiastic analysts of social change weigh in to *these* problems, then it is very easy to become more than just irritated. If such people cannot run a sweet shop, they certainly cannot handle a revolution. The naive belief that hearts and minds can be changed almost overnight, with or without political revolution, is something that too many self-professed educators allow themselves to entertain. At best such belief is sentimental and warming. At worst, and especially in the seemingly apolitical form in which it manifests itself in some educational discourse, it opens doors to a very political Trojan horse.

But weariness and indigation in the face of the rubbish written and talked about these problems will not make them go away. It is comforting to be able to turn to the micro-teaching, the varimax rotations, the classroom ethnography. All this may be — is — interesting. A good deal of it can be useful. But something much more speculative and risky — especially for academic reputations — is needed if educators are to play their part in devising a strategy for a world in which work no longer can pretend to offer a meaningful identity, in which for many people, at least for some of the time, unemployment will be a norm, and where at least in the industrially

less successful countries, expectations and entitlements may need to be trimmed to what a system subject to stricter ecological and economic limits than hitherto can afford.

In this respect, however maddening, extreme and even dangerous they may seem, it pays us to be attentive to the views of radical critics of our society, to those who would persuade us to adopt, or impose upon us, very different sets of social and political arrangements. The various fringe groups that at different phases of history have identified with "emergent values" can be seen to prefigure some elements of the forms of social relationships and structures of consciousness that characterise societies fifty, a hundred or a hundred and fifty years later. Such people are more often wrong than right, but what they have to say can contain a kernel of insight that should not be despised or ignored.

Youth Unemployment and Values

Given the survival of the main features of our present system of production and exchange, structural unemployment may have to be lived with for a very long time. Particularly interesting to the educator is how a reassessment of the value of work, and of beliefs and identities based upon this value can be incorporated into the curriculum and organization of schools *without* undermining those socialization processes that will remain essential if men and women are to acquire and practice socially responsible attitudes and behaviour.

Educators have had a good deal to say on this topic. Some of it has smacked of what Church (1978 p. 127) has called the "Joshua Theory of Innovation". If everyone shouts loudly enough, the walls will come tumbling down. As Church argues

> Such a hope that, "the British Miracle is only a change of attitude away" seems unconvincing to say the least. It smacks of revelation, or to be more blunt, coercion. There are only two ways such an abrupt change of values can come about, namely through internal "conversion" or through external direction . . . (p. 128).

Educators have found it easy to argue for a revaluation of leisure, the delights of freedom from the rat-race of nine-to-five employment and careers, the beauties of a simpler, more self-sufficient pastoral life-style. For many such people, the question of how this "leisure" is to be paid for appears to come within the category of "the Lord will provide" or "that's not my department". For others, the kind of world that will permit shorter working hours, "recurrency" between work, leisure and education, mid-life retirement, and long-term sabbaticals, will almost by definition generate such enormous economic surpluses as to ensure plenty to go round, even for those who by inclination or lack of opportunity are unable to make a direct economic contribution.

But today's world is not like that. There is argument about the limitations that will be enforced by resourse depletion and pollution (Ehlrich 1972, Kahn 1976), and about the possible consequences of rigidities in international trade and the effects of regional and even global conflict. But failure

to sustain a growth rate commensurate with those rosy scenarios of a rich and leisured world on which some educators' remedies depend is already a present reality. Janowitz (1976) has argued that a 3.5 per cent growth rate is needed to produce the surplus to enable a welfare state of the Western kind to be run without producing unmanageable inflation or social strains. The Holland Report in the United Kingdom (Manpower Services Commission 1977) argued that a five per cent growth rate would be necessary if youth unemployment was to disappear within a reasonable period.

The rate of growth in the United Kingdom has averaged about 2 per cent over the past 50 years. There are few signs that it will increase in the foreseeable future.

All this underlines the verdict of competent observers, that, as Eli Ginzberg (1978) has stated,

> Will youth unemployment go away soon? My answer is an unequivocal no, since youth unemployment is a manifestation of very serious and deep-rooted problems in the economy and in the society at large . . . I do not see the faintest possibility that a country such as England or even the United States will be able to lower youth unemployment substantially (p. 5).

If we are to avoid being caught up in a vicious downward spiral of poor productivity — low growth — inability to meet both income and welfare expectations and entitlements — industrial unrest — still poorer performance, and so on, it is necessary to identify the place at which some kind of breakout can be attempted, and the contribution, if any, that educators might make to its success.

As far as Britain is concerned, it is tempting to embrace the image that others have of us as a society in which economic considerations take second place to quality of life, to civilized cultural styles, to the conservation of urban and rural environments, and to the promotion of greater equity and social justice. Unfortunately this nostalgic image is based upon a false set of options, as the sharpening of political conflict in recent years has begun to show.

A more sophisticated version of this theory suggests that the diminishing labour requirements of industry will be substantially made up by growth of the so called "service sector". That the latter has substantially expanded there is no doubt. Between 1961 and 1976, employment in services rose from just over 40 per cent to just over 50 per cent as a proportion of total employment. Within this sector, professional and scientific services have shown the fastest rate of growth, from 9.6 to 15.7 per cent over the same period. (Sheriff 1979) Thus the United Kingdom, in common with some other industrialized countries, can be classified as a "service economy", in that a higher proportion of the labour force is engaged in service occupations than in manufacture and industry.

But economists, of both left and right, seem to be agreed that "deindustrialization" is not, in fact, an option for an economy such as that of Britain — not, that is, if current and likely levels of social and personal expectation are to be met. It has been argued, especially by monetarists and

by economists such as Bacon and Eltis (1976) that the growth of public sector service employment, in addition to being inflationary in its consequences, has deprived manufacturing industry of labour and diminished incentive for adequate capital investment. Such views are contested, but there seems little disagreement that, despite the level of our investment in research and development relative to GNP, Britain has seriously underinvested in new technology and in the nurturing and development of skills and dispositions appropriate to successful industrial competition. (See papers in Blackaby 1979.)

There is a risk here that educators who see such economic considerations as of secondary importance, who believe that the problems to which I have been referring are a product of capitalistic modes of organization, and will in due course disappear with the introduction of more effective socialist means of management, will reject the relevance of what I have been saying to the problems of education and the world of work. But as Seliger (1976) has said

> There are no great differences in ideologies of the Right, Centre and Left, for instance, in respect of the emergence of industrial society, the ways in which it operates and its structural characteristics . . . The main controversial question for both ideology and social science is whether in the long run the market economy (or some part of it) can promise, and which kind of socio-economic structure can contribute to, both maximal production and an allocation of benefits morally acceptable to the majority and favourable to their well being . . . (p. 167).

The so called service economy does not offer an alternative, because most of the services concerned are non-traded. They thus make no contribution to the balance of payments. The income transfers and opportunities for rendering service in a paid capacity that together may make unemployment personally tolerable and socially manageable have somehow to be paid for. In the United Kingdom at present, hopes are pinned on short-run resource advantages (North Sea Oil), the seizure of technological opportunities (the micro processor) and long-term industrial investment.

There are some obvious tasks for educators here, such as ensuring that a larger proportion of the population understands and appreciates the nature of the dilemma that we face as a nation* and organizing the kind of courses and training relevant to the industrial strategy. But there are deeper and more worrying problems about how far values consistent with a more just and effective world economic order can be combined with those that serve the interests of an individual nation state, and the extent to which schools should be trying to defuse the crisis of entitlements seen by some as a source of much of our present discontent. To what extent, for example, should the educator take into account the need to stress what Schwatz (1978) has called "beneficience in social control"?

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*As an example of what can be done in this respect, see Keith Pavitt's (1979) admirable talk to a sixth form Conference in 1977 entitled "Technical Change in British Economic Performance".

> In all societies there is a disparity between what men are entitled to and what is possible to give them. Limitations on resources and the adverse social consequences of according individuals their just desserts help bring this dilemma about. Social stability therefore requires that people sometimes give benefits without receiving them in return and that they sometimes refrain from visiting harm upon those who have injured them. As Gouldner puts it "certain aspects of social relationships must be exempt from both the requirements of complementarity and from the norm of reciprocity". (p. 668).

And to what extent is all *this* compatible with the stress that educators have placed on greater equality, sometimes, it appears to the exclusion of all other values?

School to Work

There is in most countries a long-standing concern with improving the means whereby young people make the transition from school to work, and a history of recoganization and reform within the responsible agencies. Until quite recently, both as a practical process and as a subject for study, the education work transition has been overwhelmingly in the hands of psychologists, and has been analysed principally at the individual level. Such theoretical elaborations as existed were rooted in the importance of relating an individual's knowledge, dispositions, personal needs and possibilities of rendering service to the characteristics of particular forms of employment.

The history of such vocational guidance has been comprehensively reviewed by K. M. Miller *et al* (1973) who records a move during the 1960s away from the concept of vocational guidance, seen simply as the provision of satisfactory job opportunities, and towards ". . . on the one hand, the broader concept of helping the individual to decide upon the style of life that he wishes to lead, and on the other the more specific purpose of teaching decision making skills. The latter is seen as a necessary pre-requisite for coping with accelerating social change". (p. 266).

Other recent trends have included a greater stress on the *developmental* as opposed to the crisis-oriented nature of guidance; a more non-directive approach, calculated to enable the individual to identify and assess his own strengths rather than simply accept advice provided by the Careers Officer or teacher; recognition that the skills involved in providing vocational guidance and counselling are specific and important and require training; a wish to offer such guidance to *all* students, not just those following the less academic courses who had hitherto been the chief customers of the service; and a recognition (especially on the part of more radical critics) of the strain between a "client centred" and a "manpower centred" approach.

It would be a mistake to believe that these ideas are new. C. Millar (1961) quotes an article by Jones and Hand in the 1938 Year Book of the National Society for the Study of Education, in which guidance is defined in terms that seem entirely contemporary.

> Guidance is coming to be regarded as the inseperable aspect of the educational process that is peculiarly concerned with helping individuals discover their needs, assess their potentialities, develop their life purposes, formulate plans of action in the service of these purposes and proceed to their realisation. The total teaching process involves both guidance and instruction as these terms have commonly been employed in the past, and as inseparable functions. Neither can be delegated in any discrete manner to separate functionaries . . . ideally, there would be no such thing as a separate or self-contained guidance programme. Rather, guidance and instruction would be functioning as inseparable parts of a unitary educative process. The needs of students would constitute the stuff out of which a broadly defined scope would be formulated for the school curriculum . . . (p.6/7).

Alongside these modifications to the philosophy and practice of vocational counselling, the effects of sociological research have begun to be felt in discussions of the education-work transition. The naivete of viewing this as a process of 'talent matching' of individuals and jobs has come in for criticism. March and March (1978) have challenged the theoretical rationality behind the "square pegs for square holes" philosophy.

> . . . the world of work is viewed as consisting of a pool of workers and a pool of jobs. Each worker and each job has certain attributes that are valued by potential partners. The pairings of jobs and workers are such that neither workers nor jobs can do better . . . (p. 435).

In fact, of course, these perfect market situations do not exist. The possibility of substitutions both in respect of workers and of jobs is in many fields of employment very high, so high as to give the process of selection and placement a ritualistic rather than realistic character.

Drawing upon several decades of research on occupational and social mobility, and the links that exist between achieved educational levels and types of occupation entered, the sociologists have poured scorn on the individualist ideology of vocational counselling. Carter (1966) showed that only a third of the boys and half of the girls in his sample got jobs of the kind they were asking for. Maizels (1971) found that only one-third of leavers obtained jobs that reflected their own aspirations. Commenting upon these, and other similar findings, Roberts (1977) argues

> To predict the type of work that a school leaver will obtain, the relevant information concerns not what he would ideally like to do, but his educational qualifications and to a lesser extent the occupational status of his parents, together with the local job opportunity structure (p.3).

On this reading, aspirations were best understood "not as preliminaries to decisive occupational choices, but as products of anticipatory socialization" (p. 5).

Even in terms of its predominating individualist ethos, career education has been criticised for its failure to take individual needs into account. On

the basis of their study of the transition from school to work, Hill and Scharff (1976) found that

> Whether there is a person responsible for 'careers' within the school or not, we found no one in any of the schools who thought *systematically* about the connection of work and the psychological meanings of a given job or occupation with the stage of development, with opportunities for growth, and with inner needs and resources of an individual student (p. 268).

The work of guidance counsellors has for a long time been regarded with suspicion, especially by those committed to comprehensive forms of secondary education and the abolition of streaming and tracking. In the words of P. Taylor and Musgrave (1969)

> The spread of counselling in our schools is one of the most potentially sinister features of the contemporary educational scene. It can become a device for restoring a teacher despotism which other forces have eroded. As more children of limited ability stay on in English schools beyond the statutory leaving age, we can expect to see an army of counsellors employed to cool them out (p. 11).

There is now a considerable vogue in sociological analyses that trace the connection — or, in the term popularized by Bowles and Gintis (1976) the "correspondence" — between the regime and values experienced and imbibed in schools, and the attitudes and behaviour consistent with occupancy of particular statuses in the adult world. An emphasis upon such "correspondence" has become the hallmark of those who find the educational and social arrangements of a contemporary capitalist society repugnant, and who wish by democratic, extra-parliamentary or, in some cases, even violent means to overthrow existing structures in favour of what usually turns out to be vaguely conceived arrangements consistent with highly personal millenarian interpretations of Marxism.

It is a pity that the debate on these matters has now acquired, at least in some places, such a strongly ideological character. It is surely possible to demythologize the rhetoric of careers preparation, and to recognize the realities of working life in an industrialized and urbanized class society characterized by a division of labour, *without* becoming an exponent of revolutionary change. For some radicals, the fact that society is unable to offer to all its youth a personally enriching as well as materially rewarding occupational future is a matter of grave moral concern. For conservatives, the impracticability of meeting the likely aspirations and expectations generated by better quality education is seen as a threat to social stability and orderly reform. Both radicals *and* conservatives who make judgements upon these matters are for the most part drawn from that narrow spectrum of society which has indeed learned to entertain large expectations of personal fulfilment through work. Unfortunately for the radical, fortunately for the conservative it seems that a large proportion of our young people have not. Instead, they possess reasonably "realistic" expectations about what working life has to offer. In the words of a recent study,

> . . . young men and women had feared the entry to work. They had expected callousness, cruelty, unreasonable demands, ogre-like gaffers and carping or mischievous colleagues. The reality was always better than the expectations even in the most unsatisfactory jobs. For the majority, once the initial phase was over — and that usually lasted a short period of at the most six months, but usually a few weeks or even days for some — the new employee role was felt to be preferable to the pupil role, despite the lack of thought put into the change-over by most employers.
>
> This meant that, in common with other research . . . we found that young people did not describe their own transition from school to work in terms of implying crisis. Education was, as David Downes describes it "an irritant" (Bazalgette 1978).

To espouse barricade eschatology (Bowers 1978) or the utopian images of the neo-romantics is easy. Much easier than to tackle the problems of improving the quality of working life, relating schooling and employment without sacrifice of fundamental educational values and facilitating transition between the two in an existing and very real world. It is thus hardly surprising that so many educators have adopted Neo-Marxist and quasi-Romantic postures. In the meantime, for some people at least, there is work to be done.

Reference has already been made to charges concerning the ritualistic character of vocational guidance and counselling. These have been linked with the view that such counselling played very little part in influencing individual decisions. This has been challenged by Lambert (1978) who states on the basis of an analysis of data collected in connection with the National Child Development Study

> The . . . assertion that 'there is no study of school leavers in Britain in which the Careers service, careers teachers or any other body offering vocational guidance has emerged as a major influence' . . . is not borne out by our findings. For the young people in the NCDS the predominant source of information regarding their likely first job was said to be 'at school, from a teacher or careers talk or film'. Our findings have however shown that the influence of such information on their choice was likely to be greater on those who were doing well at school (p. 158/9).

Within the past few years, the notion of "Careers Education" which first gained prominence in the United States, has been widely applied elsewhere. Such application has received an impetus in the United Kingdom from the requirements in the 1973 Employment and Training Act that local education authorities should provide such a service in all their education institutions. The scope of Careers Education is a good deal wider than that of vocational guidance. It has been defined by Daws (1977) in the following terms:

> CEPs are primarily concerned to help young people determine the kind of life that they want, and in that context to consider which amongst the jobs realistically available to them offers the most likely and approximate fit to what they seek as a style of life and as a

> satisfying way of "making a living". To achieve this, CEPs must first help pupils to achieve a degree of accurate and full self awareness, including a realistic sense of personal strengths and limitations, a capacity for accurate calculation of the probabilities of their achieving what they find attractive, and a shrewd knowledge of what they might do — well in advance of meeting selection processes — to prepare themselves for these processes (another anticipatory socialization function) (p. 11).

Bazalgette (1978) has argued that the site of such work should not be *between* school and employment, but should encompass elements of both.

If, as I have suggested earlier in this paper may be the case unemployment is part of the post-school reality with which pupils must contend, then a Careers Education Programme must give due weight to this possibility. This has been recognised by Watts (1978) who suggests that some possible curricular objectives relating to the issue of unemployment would include *employability skills*, such as job search, job acquisition and job retention; *adaptability awareness*, to broaden the range of what is contemplated as possible; *survival skills*, which would encompass an awareness of the psychological effects of unemployment (see Marsden 1975) and a knowledge of what support services are available within the community *contextual awareness* embodying an appreciation of why unemployment is a current reality; *leisure skills, alternative opportunity awareness* such as MSC Programmes and educational openings and finally *opportunity creation skills*, not omitting the possibilities of self employment, and individual entrepreneurship.

Many of these principles have been incorporated in the UK schools Council Careers Education and Guidance Project. Based upon a concept of Careers Education that "involves presenting individuals with learning experiences which encourage them to make personal decisions and to act on these decisions so that they can gain an increasing measure of control over their own lives", the Project leaders have argued for 'work' as a subject of study within the school. They have sought to provide teaching materials that could be used in an integrated way in connection with e.g. Social Education, Economics, English and other subjects, whilst at the same time providing examples and situations which pupils might discuss amongst themselves and with their teachers. Hitherto, there has been a heavy emphasis in vocational work in schools on the informational content of what is provided. But if pupils are unwilling or unable to use and interpret such information, merely to go on adding to it serves little purpose. Trials were conducted in over three hundred schools, and involved more than a thousand teachers working with 150,000 children. The teaching packages are of an unconventional design, based upon a media-style presentation designed to appeal to a broad range of pupil interests. Since there are great variations in the way in which schools tackle career work, the adaptability of the materials has been stressed.

If it is to be useful and effective, careers education needs to develop what may be called both horizontal and vertical linkages. Horizontally with on the one hand the processes of vocational education and training that

feature in the general and specialist curricular of the school, and on the other with the "in-work" training that is supplied by employers. Vertically, in respect of those different categories of clients that have been identified by OECD (1978) as

(i) those who will enter the labour force at the end of compulsory education;

(ii) those who will enter the labour force at the various levels of post compulsory education

a. with an employment qualification;

b. without an immediately useable employment qualification;

(iii) those new entrants already in the labour force who have difficulty finding employment;

(iv) established members of the labour force who are unemployed or who wish to change their employment or improve their qualification (p. 21).

While, as has been emphasized, information is not in itself sufficient as a basis for adequate counselling, it is vitally necessary. There are certain inherent lags in the signalling system by means of which educational institutions respond to changes in the market for labour, and employers modify their recruitment and training policies and structures in response to variations in the quantity and quality of the output from the schools and colleges. It must be stressed that this is essentially a two-way process of mutual influence. A whole paper would be written on ways in which the channel capacity and message clarity of this system could be increased, and the "noise" that surrounds many of the messages that it carries reduced, but in the present context it must be sufficient to mention one or two modest steps that might be taken in this direction.

In the post-secondary sphere, institutions need freedom within their budgets to respond to needs for skilled development and manpower training that arise, often at relatively short notice, from industrial, economic and technological developments in their neighbourhoods. This requires the existence of a strong regional or local orientation on the part of some at least of the institutions concerned, discretion in the mounting of new programmes and the closing of old ones, and staffing strategies, including buying-in of sessional instructors and the carrying of a proportion of short-term appointments, that will facilitate rapid adaption. It is partly with this in mind that a Department of Education and Science working group in the United Kingdom has recently recommended that Polytechnics and other public sector Institutions of higher education, should, like universities, be "programme funded" rather than having to seek approval on a course by course basis.

But forms of financial and course control that facilitate institutional adaption will not work if internal structure inhibits change and requires lengthy administrative and political bargaining delays before a new course can be offered. Where a departmental structure based upon strongly institutionalized disciplines or professional orientations exists, such difficulties can sometimes be acute. The existence of a number of fairly loose inter-

disciplinary groupings, centres, units and areas can facilitate change without threatening the basic disciplinary or professional structure.

The efficacy of the signalling system between education and the world of work can also depend a great deal on the existence of a complex network of individual contacts, based upon professional associations, community groups, regular mutual visits, one-off lectures and consultancies, lay representation on governing bodies and advisory committees down to the individual department of course-team, access to common literature and so on. Effective signalling depends on permeable boundaries.

Fortunately, the production and dissemination of high quality information in useable form is being facilitated by the application of computer technology, the introduction of video display facilities such as those of the UK "Viewdata" system, and the growth of community broadcasting and cheap reprographics. Viewdata offers the possibility of colleges and employers providing frequently updated information about job opportunities and training students and workers through telephone linked television sets. Eventually such sets may be found in most homes. In the immediate future they will be a facility provided by job centres, post offices and public libraries.

The theory and practice of careers education has of necessity had to be developed in a way that takes account of the reality of status and income differentials; highly imperfect markets for labour; selection mechanisms the rhetoric of which is that of meritocratic desert, but which are still powerfully influenced by ascription and chance; role requirements that demand early rather than late socialization, and an economic context affected by the vicissitudes of international trade, the uncertainties of technological innovation and implementation, and the hazards of political judgements concerning fiscal and monetary policy. At the same time, careers education has to accommodate as best it may to the imperatives of equality, openness, recurrency of opportunity and democratic participation by means of which educational decisions, both at system and individual level, are increasingly legitimated.

In this context there are great difficulties in matching the individualist and development imperatives of what may be called the careers education ideology and the 'realities' of the world of work. Petersen and Johnson (1977) undertook a content analysis of a selection of the Careers Education materials used in the United States Schools, and were forced to conclude that 'the analysed materials are defective in supporting career education's goals of realistic student expectations'. In their judgement 'curriculum writers have tended to work only one side of the street and . . . the resultant unbalanced concentration on an idealized view of work promotes naivete that sets the student up for eventual disillusionment and defeat' (p. 54).

Just as the local medical practice lacks status in comparison to the research laboratory in which the causes of particular diseases are investigated and explained, so the careers educator has to endure the charges of the sociologists and radical reformers that he is merely facilitating or marginally modifying for the individual the impact of highly determined group processes, which his lack of activist political commitment debars him from altering.

This has had its consequences for the resources and the status accorded to the academic study of vocational guidance and careers education, and the opportunities available within colleges and the universities for the training and further education of its practitioners. Few professors of education in the United Kingdom claim this as their principal speciality. To complicate matters still further, the fact that most clients of careers education in the past were those who found it hardest to secure satisfying and remunerative employment, and for whom the concept of a "career" was in practice least appropriate, does not help the image and status of the specialism. To maintain the medical analogy, while the discovery in the laboratory of a particular virus and of the means of immunizing whole populations against it is much more 'significant' than the efforts up to that point of individual GPs to alleviate the condition of persons suffering from that disease, the possibility of such a discovery does not cancel out the importance and relevance of the GPs work. Indeed, even when the larger medical or societal change has occurred, the need for individual diagnosis, prescription and evaluation does not disappear, even if its context is very different from before.

It would be a pity if the search for underlying historical and social determinants, the building of 'critical theory', and a stress on creating the political base for structural reform were to divert attention from the needs of individuals for information and face to face counselling and advice. A market system which does not depend upon early indenture to specified occupations or upon the direction of labour, inevitably has its casualties. Devising the means whereby their number can be minimised, and those who fall can be helped, is inevitably less glamorous than the 'barricade eschatology' that increasingly seems to characterize some branches of educational discourse. But it is important work, none the less.

Education and the Quality of Working Life

Lest we embrace too sharp a contrast between the work orientation of Victorian times and that of today, we might remind ourselves that nearly a hundred years ago the socialist Lafargue wrote

> A strange delusion possesses the working classes of the nations where capitalist civilization holds its sway. This delusion drags in its train the individual and social woes which for two centuries have tortured sad humanity. This delusion is the love of work. The furious passion for work, pushed even to the exhaustion of the vital force of the individual and his progeny. Instead of opposing this mental aberration, the priests, the economists and the moralists have cast a sacred halo over work. Blind and finite men, they have wished to be wiser than their Gods; weak and contemptible men, they have presumed to rehabilitate what their God had cursed. I who do not profess to be a Christian, an economist or a moralist, I appeal for their judgement to that of their Gods; from the preachings of their religious, economic or free thought ethics to the frightful consequences of work in capitalist society (pp. 9-10).

This theme has a continuous history, especially in radical thought. Marxist rhetoric in particular stresses the hostile and alienating character of work in a capitalist society, in which, in the words of Behn (1974) ". . . Job

experiences are not rewarding beyond pecuniary gains. Work is necessary in order to consume and consumption is the sphere of activity where people can express their 'freedom' and 'creativity' to the extent that they can afford to do so . . ."

The middle class drop-out, who gives up his lucrative employment to join a commune or to become self sufficient on a north-facing Welsh hillside classified agriculturally as 'marginal land', is something of a culture hero.*

It is impracticable for me to offer adequate evidence in the present context for a view that lies back of much of the subsequent discussion in this section, namely that the experience of work in an industrialized capitalist society and in an industrialized socialist society are not all that different. Indeed, Marx himself in his "Critique of the Gotha Programme", distinguishes between the conditions of post-revolutionary socialism, where unequal individual endowments will produce inequality in productive capacity and therefore unequal reward, and the position under the eventual 'higher stage' of genuine Communism, when such abundance has been achieved that individuals will receive according to their needs (Bell 1976 p. 262). Many radical humanists, recognizing the realities of employment under "State Socialism", lack any historical or currently extant model of an economic system and work relationship that accords with their own values and ideas. China for long had a claim to their allegiance, which it has recently begun to lose. As 'socio-technical' theorists of organizations have argued, the pattern of relationships in the work place is largely influenced by the nature of the technology employed. In this respect, motor car factories are very different places from steel works, coal-mines from hotels. The kinds of adult socialization that go on in these work settings, the nature of the everyday consciousness of the employee, have more to do with the kind of work he or she is doing than with the form of ownership and control. I do not want to argue that the latter is of no importance. There is, in fact, some interesting empirical evidence about the effects of employee ownership on productivity, profitability, morale and work satisfaction. In the light of all this, I do not find it particularly profitable to draw sharp contrasts between a subjective experience of work in, on the one hand, the UK, the USA and Australia, and on the other, the Soviet Union, Cuba or Albania. What is likely to matter much more than the particular political system of the society in which a person is employed is the level of industrialization and organization of the enterprise in those societies.

This said, what do we know about the criteria that people have concerning quality of working life, and to what extent can education help to satisfy these criteria? There is now an extensive literature on this subject (for a useful cross section, see Davis and Cherns (1976) Campbell (1976). Walton (1976) lists eight criteria.

(a) Adequate and fair compensation.

(b) Safe and healthy working conditions.

*It is an interesting commentary on the domestication of this idea in the media that two recent British TV series have involved a family that 'drops out' to become self sufficient in its own back garden ("The Good Life") and a high-powered industrial banking tycoon who relinquishes his status and power to become the mere (mere?) manager in a desirable seaside town ("Telford's Change").

(c) Immediate opportunity to use and develop human capacities.
(d) Opportunity for continued growth and security.
(e) Social integration in the work organization.
(f) Constitutionalism in the work organization.
(g) Work and the total life space.
(h) Social relevance of work in life.

It is the conventional wisdom (especially, as we have seen, among intellectuals and educators) that most people do not enjoy a high level of work satisfaction. There is certainly some evidence to show that work is not a 'central life interest' for more than a minority. To quote a useful survey of the relevant literature by Dubin *et al* (1975)

> In the first study of this topic, twenty four per cent of the industrial workers in the sample reported work as a central life interest. In studies made since that time, an even lower percentage of blue-collar workers in a variety of settings have been found to have a central life interest in work. For example, only 14 per cent of the lumber workers surveyed . . . and only 12 per cent of the long distance truck drivers . . . had a job oriented CLI. Several studies have shown clerical workers to differ widely in their CLI in work; 76 per cent of the Amana Society sampled . . . 24 per cent of the Canadian retail sales clerks . . . and 14 per cent of the British Bank clerks.

But if work is not a central life interest, this does not mean that the worker is necessarily dissatisfied. When Cantril and his associates asked 20,000 people in countries around the world to identify features of their lives in respect of which they had particular feelings of deficiency only 26 per cent expressed a wish for 'more interesting work; [a] more congenial job' against twice that number opting for 'more pay, larger income' and a full 53 per cent who chose a 'better education than I have'. This, of course, proves nothing. As the record of human behaviour under extreme circumstances testifies, we are capable of adapting ourselves to a wide variety of circumstances, not least those of the work place. The fact remains that levels of work satisfaction reported in surveys (as distinct from the individual statements selected by some authors to illustrate their theses) tend generally to indicate a greater measure of contentment than superficial observation by non-participants, or short participative visits by sociologists with return tickets might suggest. This phenomena has been discussed in relation to what is called "tolerance theory". By a combination of processes, including task disassociation, a focus upon peer-group relations, accommodation to short term substitute goals which structure an otherwise meaningless activity, people come to terms with the demands of their working environments.

For many people — perhaps for most — this process of adjustment and accommodation means that something is lost. Novelists and imaginative writers have done rather better than psychologists and sociologists in describing what has to be sacrificed. We are short of accounts that analyse the human costs and benefits of socialization within the work place. We need more studies such as that of Ihde (1975), who looks at the phenomenology of man-machine relations in terms of the extent to which the machine is an

extension of personal capacity, a tool under conscious control, or itself the determinent and director of speed and response, a difference that can be represented as [(man-machine)——— world] *or* [man——— (machine-world)]. It has been argued by Blauner (1964) that the possibilities for higher levels of work satisfaction are greater in the higher automated factory, where workers feel themselves to be in charge of the machine rather than paced by it; evidence on this issue is not all in the same direction (Cotgrove 1976) and much work remains to be done, especially in relation to the specific problems that are presented by such factors as the employment history of the area concerned and the specifics of the technologies involved. (See also Bensman and Lilienfeld 1973).

In some contemporary statements about occupational alienation, the author too readily assumes that, if they had been given free choice before the corrupting effects of work in an industrialized society eroded their capacities for response, his subjects would have freely chosen some other kind of work and given it central life interest, just as the author's own work is for him. But there is another side to this. Coser (1974) has written of those institutions which make " . . . total claims on their members and which attempt to encompass within their circle the whole personality. These might be called *greedy institutions* in so far as they seek exclusive and individual loyalty and they attempt to reduce the clashes of competing roles and status positions on those they wish to encompass within their boundaries . . ." (p. 6).

The last decade has seen efforts in several countries to give workers a larger say in the policies and decisions of their enterprises. Attempts to institutionalize participation, often within the rhetoric of industrial democracy, generally represent the application of a concensus model, in which employees acquire certain rights in return for the acceptance of greater responsibility. It has been argued, however, that the "conflict model" represented by collective bargaining and the growth of trade union power is a more real form of democratic participation than the creation of works councils and the co-option of employees onto Boards of Directors. But here as elsewhere, the evidence on the desire for and effects of greater participation in the work place is not all in one direction. Alutto and Belasso (1972) have introduced the idea that employees can be "decisionally saturated", called upon to participate to a greater extent than they desire, as well as "decisionally deprived". In their work with teachers, they found that *over-participation* could give rise to as much dissatisfaction as lack of opportunity to participate. In fairness, however, it must be said that the direction of their findings suggested that far more teachers are "deprived" rather than "saturated", and there is a long way to go before an appropriate equilibrium is secured (Taylor 1976). Long (1978), in a study of a medium-sized regional trucking firm that had been taken over by its own employees following a series of disastrous losses, distinguishes between *ownership* and *participation*, the former having no necessary connotations for the latter. In examining the effects of employee ownership, he found that "Creation of a joint pay-off relationship through employee ownership did appear to favourably influence integration, involvement, commitment and satisfaction, independently of the effects of increased participation". Profits were up, labour turnover was down.

The implications of what has been said so far in this section is that efforts to raise job satisfaction, increase participation and spread the benefits of ownership, *can* have positive effects on the quality of working life as experienced and reported upon by those immediately concerned, but that, as in all things, excessive and ill-judged enthusiasm in these matters can have unforeseen negative consequences. Furthermore, we need to be aware of the bias that particular methodologies can introduce into studies in this area. I have earlier drawn attention to the failure of many studies of attitudes successfully to predict actual behaviour. Simonds and Orife (1975) examined worker behaviour (rather than attitude) in relation to job enrichment and remuneration and found strong support ". . . for the view that pay increases are important to non-supervisory workers even at small differentiations. It indicated either indifference to job routineness or perhaps that while some of the workers may have preferred less routine jobs, a possibly equal number may have preferred more routine jobs" (p. 611).

What in this context can be said about the role that education might play in improving the quality of working life? The establishment of clear one-to-one relations between particular kinds of educational input and subsequent gains in worker satisfaction and personal fulfilment are not really what matters. Back of every teacher's efforts lies the simple faith that the more literate, numerate and socially aware the student, the wider the range of of personal, social and occupational skills at his command, the greater his confidence and capacity for coping with adversity, then the more likely he is to secure a sure foothold in the world and to work, to derive something of value from his work experience and to render better service to his family and his fellows. Most teachers are not politically aware in the sense of cultivating a capacity for what analysts of ethnic and age relations have called "resistance". (Hall and Jefferson 1976). They cannot predict the future circumstances of their students, they cannot control the extent to which external circumstances, nepotism and chance will determine subsequent occupational opportunities and destinations. It is precisely this uncertainty that in the past has been used to justify a general rather than a vocational education, a broad preparation for a variety of unpredictable subsequent conditions, rather than specific training for a task that in five, ten or twenty years may no longer exist. Within the past year or so, however, the problems of unemployment, complaints by both employers and employees about the "irrelevance" of what is done in schools to subsequent adult experience, and a desire to minimize the disaffection of youth from education have come together to encourage interest in the identification of the skills and competencies of working life which might now be used as a basis for an educational programme that is *both* general *and* vocational in character. The OECD (1978) has secured at least a verbal integration of general and vocational in a sentence that is worth pondering.

> Education will be completely general only when it includes preparation for life at work as an inseparable part of preparation for adult life (p. 18).

About now an inter-governmental conference is taking place in Paris to consider the list of competencies drawn up by the secretariat of OECD and circulated to member countries in March 1979. The Secretariat distinguished

between three competency domains — intellectual, psycho-social and practical. Within the first of these, the two major headings are reasoning (recognizing why certain processes or actions precede or follow others in a work situation; identifying and defining problems correctly) and the ability to learn. The psycho-social domain includes personal and social skills (of communication, acceptance of supervision and control, ability to work with others and alone, the taking of initiative and the assumption of responsibility) knowledge of the world of work, and competences in surviving and developing in employment. Finally, under the heading of practical competencies come literacy (reading, writing, speaking and listening, knowledge of another language) numeracy, manual dexterity, elementary technology, competency in finding a job and health and safety.

Whether the details of this list will survive the scrutiny that it will undoubtedly receive in the member countries of the Organization and at the conferences called to prepare a final version remains to be seen. Whilst there is nothing very original about such lists, they do represent an attempt to break down content and status barriers that still exist between vocational and general education, and to relate both to the lives that students will live as citizens and as workers, not excluding the possibility of periodic unemployment.

To translate such aims into curriculum, pedagogical practices and appropriate modes of assessment is a larger and more problematic task. There is much work to be done in bringing learning theory and instructional methods to bear on the problems of skill acquisition and social learning. There is no shortage of schemes based upon operationalized objectives. (Keller and Sherman 1974) but most such schemes have a rather narrow focus, being concerned with the impact of a particular unit of instruction or course without paying too much attention to student characteristics and situational factors. Given the importance of attitudes and motivation on the part of students whose attendance will be largely on a voluntary basis, a satisfactory pedagogic model for the integration of general and vocational education will need to be constructed within broader framework and one which places due emphasis on the way in which previous school and work experience influences response to subsequent learning. In this respect the 'Mastery Learning' model of Bloom (1976) has the advantage of stressing the importance of cognitive and effective entry characteristics in relation to the success of instruction and its outcomes.

In passing, it is worth noting that the claim that "most students can attain a high level of learning capability if instruction is approached sensitively and systematically, if students are helped when and where they have learning difficulties, if they are given sufficient time to achieve mastery, and if there is some clear criteria of what constitutes mastery" (p. 4), if substantiated, has important policy implications. In Bloom's own words

> If the schools can bring a large majority of students to the level of learning that was hitherto expected of only the most gifted and able students, it can no longer be with expectation that such students will go on to do advanced work in the subject. No field could possibly use so many 'gifted' students. More and more it will be necessary to ask

> whether the time and effort required to learn a subject to a high level can be justified for the particular students, the school, and the society. Thus, the increased ability to control and determine the school learning of our students places upon educators increased responsibility for providing a curricula which is in the best interests of the students and the society (p. 214).

When the amount of talent in society is a scarce resource, assumed to be determined by genetic inheritance or by environmental influences that are beyond the educator's control, the task of the schools is to identify, select and nurture such talent. But if Bloom is right, and if we now have the means to bring everyone up to the level of the best, the policy problem is far greater. There are resonances here of the old argument about 'over-educating', of producing so many people with high school diplomas and degrees that there will be no-one left to undertake the computer-age equivalents of hewing wood and drawing water. I raise this problem only quickly to drop it again, as beyond the scope of this paper. But the possibilities that Bloom's claims raise, even if we dispute the likelihood that mastery learning can be successfully operationalized within existing or likely resource constraints, certainly need discussion.

So do ideas such as those of Cronbach and Snow (1977) who in connection with an analysis of what we have to learn from research done on learning interactions ("an interaction is said to be present when a situation has one effect on one kind of person and a different effect on another" p. 3), argue that single rank, meritocratic selection has a strongly conservative influence, in that it takes out of academic programmes those who are less easily taught and thus removes the incentive for teachers and institutions to devise procedures for helping those with 'non-standard talents'. Whilst not sharing Bloom's assumptions about our capacity to generalise high levels of mastery, Cronbach and Snow

> urge the social planner to be concerned not with running a fair competition but with running a talent-development operation that will bring everyone somewhere near *his* or *her* highest level of contribution (with due regard to the educational requirements of the society). The complex technical society needs a high percentage of persons in advanced occupations to maintain physical well being and promote cultural developments. It can use trained persons in large numbers, and it has almost no way to use untrained manpower. Any untrained segment is a source of social chaos and demoralization (p. 8).

It is also worth noting that Cronbach and Snow's findings are not consistent with those of Bloom as far as eventual outcomes are concerned. "We once hoped that instructional methods might be found whose outcomes correlate very little with general ability. This does not appear to be a viable hope. Outcomes from extended instruction almost always correlate with pretested ability, unless a ceiling is artificially imposed." Those last few words are also thought provoking in relation to the aspirations that some people have for greater equality of outcomes.

Conclusions: Policy and Practice

On pages 6-8 of this paper I listed twelve reasons why educators, administrators and policy makers are today expressing renewed concern about the relationship of education and the world of work. In the central sections of the paper I have discussed the context and nature of some of these concerns. In this final section I want, somewhat telegraphically and dogmatically to list a number of developments in the policy and practice of education/work relations that would be beneficial to individual students, to schools and to society.

First, efforts are needed to raise the average attainments of the school leaver by identifying those skills and forms of knowledge into which every future worker and citizen needs to be inducted as a basis of subsequent learning and responsible social participation; by devising means whereby teachers and schools can be accountable to their publics without sacrificing appropriate kinds of professional autonomy or engaging in practices that stress short term gain at the expense of long-term educational benefit; by more careful initial selection of teachers, improved initial training, systematic induction and carefully devised and freely available in-service education and career development; by the identification and dissemination of good practices, and by the selection, evaluation and effective utilization of audio-visual and computer-based teaching aids.

Second, on the assumption that unemployment consequent upon the imperfections of the world economic order and the impact of technological change will be a continuing problem in many countries for the foreseeable future, we need to devise support systems and training programmes calculated to minimize the effect of such unemployment on social adjustment, willingness to seek work, openness to new educational opportunities, and ability to render public service.

Third, we must learn from the debate that has gone on over the past decade about continuing education, recurrent education, *education permanente*, lifelong education and community education and create such structures and means of financial support as will encourage adult workers to take full advantage of post-experience training and re-training opportunities, especially during periods of involuntary unemployment and as a preparation for retirement. The targets for such programmes and financial support schemes need to include the whole range from adult non-literatures to highly qualified professionals who require to be kept abreast of new research findings in their respective fields. While such needs cannot be met with a single type of institution, however polytechnical in character, the plurity of organisations, institutions and training mechanisms that make up such a system needs a minimum level of co-ordination, sufficient to ensure that gaps are identified and filled, and wasteful duplication is avoided.

Fourth, in those countries where agencies outside ministries and Departments of Education have grown up — sometimes very rapidly — to provide a variety of education and training schemes to cope with unemployment and shortages of skill-training facilities, careful thought must be given to the costs and benefits of administrative and financial separation of responsibility,

and to the possibilities of integrating such education and training within a single comprehensive service.

Fifth, attention needs to be given to ways in which what I have called the 'signalling system' requires modification in the light of the looseness of fit that characterizes levels of schooling and entry to particular occupations where academic, general and vocational education are integrated within a single school system or range of post-compulsory institutions. While we need to understand the macro-relations of family background, school achievement, occupational choice and career progress, such understanding, and the programmes of social and political reform to which it is linked are no substitute for the provision of appropriate careers education for individual students. If individual counselling and guidance is to be effective, it needs to penetrate both school and work place, and to be conceived as a continuously available service, not simply as a means of easing the transition from school to work.

Sixth, we have to reconceptualize the idea of work in environmentally conscious, industrialized societies, in a way that takes account of the likelihood of structural unemployment, minimizes effects of such unemployment on individual morale without at the same time eroding a commitment to service, and lends dignity and value to those who are the recipients of income transfers without destroying motivation and the will to labour. All these things are much easier said than done. But it is nonetheless important that they be said, and go on being said, for it is through the dissemination of ideas by the media, through debate, through discussion and conference that such ideas are refined and assimilated and their institutional implications worked out.

Seventh, academics and researchers need to play their part in mobilizing all those disciplines capable of contributing to a better understanding of the relations between education and work. At present, the discourse of economists, sociologists, specialists in instructional methods, enterprise managers, policy-makers and guidance specialists share very little awareness of a common problem. Examine the bibliographies in articles and books produced by authors from these various fields, and you find very little intercitation. This is particularly marked when comparing the writings of sociologists on the distribution of opportunity and life chances *vis-a-vis* subsequent employment, and those of psychologists and guidance specialists discussing ways in which individuals can be better prepared to face the demands of work. The result is the use of a lowest common denominator of theory, concept and reference, with a corresponding loss of rigour and explanatory power. I hope that the discussions at this conference will have done something to indicate the importance of acquiring elements of a common vocabulary and research corpus when discussing education and the world of work.

In connection with the kinds of unity of purpose between labour and management that were stressed by Professor Jochimson, let me say this. The complex interdependencies characteristic of technological societies tends to place great power in the hands of small groups of people, such as the boards of multi-national companies and the executive committees of trade unions. If such groups pursue their interests without sufficient regard to

broader concerns and some perception of the general good, then life in democratic societies becomes very difficult. It is always possible to produce intellectual justifications for action in the pursuit of self interest. The businessman asserts the importance of market freedom; the union leader stresses the absence of equality. The power that is wielded in this way creates situations for which our political, moral and educational systems have yet to come to terms.

The growth of centralized *political* power in the nineteenth century has been followed in this century by the growth of *organizational* and *technical* power, the button — and the show-of-hands ballot, that can under certain circumstances threaten the constitutional and social stability of the nation state. Appeals for national unity and a recognition of the public interests sit uneasily with the demythologized, disenchanted sophistication of our age. Marx, Freud and the examples of totalitarianism we have seen in the modern world have combined to make us suspicious of claims to represent the general will. Self consciousness of our own darker motives has affected our interpretation of the motives of our fellow men and women.

How then can we develop attitudes, behaviour and structures that recognize our interdependence and the dangers of electronic and group power, that recognize the sterility of a confrontational stance between manager and workers and the actual and potential dangers of conceptualising labour relations in terms of confrontation and conflict rather than co-operation and consensus, *without* resorting to outdated and reactionary calls for "national unity" and the pious neglect of self-interest, in ways that will protect democracy as well as fostering flexibility in employment patterns and practices? That is one of the most demanding challenges that face us as we enter the 'eighties.

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"CONTEMPORARY SCHOOLING, COMPETENCE AND COMMITMENT TO WORK"

2. P. W. MUSGRAVE

Introduction

At least in theory the knowledge that those in schools attempt to teach can be divided into two broad types: academic knowledge, at present largely in written form and in the main relating to the learned disciplines, and moral knowledge that concerns how human beings treat each other. The curriculum taught in any school can have both manifest and latent effects upon its students. Many of these outcomes influence both the way in which students move from school into their first jobs and whether they settle easily into their work.

The first topic to be considered here will, therefore, be the relationship between the curriculum and the move to work. The analysis will reveal that one crucial influence in this connection must be the degree of commitment that young persons have both to work in particular and to the economic system in general. For this reason commitment will form the focus of the second section of this paper.

However, the nature of the process of movement from school to work is always changing, because both the economy and the educational system are themselves constantly changing. The third part of the analysis will, therefore, examine the relevant changes in the nature of both the economy and education as found in contemporary Australia. Finally, some general conclusions will be drawn from the whole analysis; these should guide future policy in this field, particularly in relation to educational responses to the present growth of unemployment.

The Curriculum and the Move to Work

(a) *Academic Knowledge.* Very rarely has any attempt been made, as was in Sweden in the early -1960s to ask those in industry what basic skills in the 3Rs they considered necessary for a worker to operate efficiently in an unskilled job (T. Husen and U. Dahhlof, 1965). There have been studies that tested the achievements in the 3Rs of school students of various ages, including those at the point of moving into work. Such tests specify certain criteria seen as important by the testers or those sponsoring their work and measure the proportion reaching the chosen standards. There is great difficulty in finding agreement about the criteria to be used, particularly in tests that go beyond the basic 3Rs. Thus, in an attempt made in Australia in 1976 to specify essential items in the field of Social Studies, out of fifty-one possible items only 12 were seen as "essential" by more than 60 per cent of the respondents; strongest support was given to the teaching of skills needed in inquiring and in making decisions, whilst rather less support was given to items dealing with specific subject matter (K. J. Piper, 1977; 135).

119

We do have some firm information about Australia regarding achievement in the basic skills of literacy and numeracy. A large-scale study, sponsored by the Commonwealth Government and undertaken in late-1975, has shown how a representative sample of fourteen-year-olds measured up to a set of simple skills, most of which can readily be assumed as necessary for any worker. 28 per cent had "not achieved mastery of those basic skills of reading that would enable them to read effectively a reference book or to glean information from a simple newspaper" (J. R. Keeves *et al.*, 1978; p. 19). In the field of writing 92 per cent could write a simple personal message, but only 50 per cent a formal application for a job. Finally, in tests of numeracy 25 per cent failed to demonstrate overall mastery in the tests; indeed, 11 per cent "could not record the time shown on the face of a watch" (p. 27).

Though these levels of achievement seem low they are not greatly at odds with results using the same tests in other similar countries. Australian fourteen-year-olds read as well as those of the same age in England and very slightly worse than their peers in Scotland, the U.S.A. and New Zealand. However, in the numeracy tests the Australian fourteen-year-olds may be at a disadvantage, as on some of the tests used they only equalled the performance of thirteen-year-olds in the U.S.A. Yet despite these apparent failings in the basics there is evidence to show that not all those involved are dissatisfied. In a large study of the views of students, parents and teachers about the aims and achievements of secondary schools that was carried out in the mid-1970s in N.S.W. and in Melbourne both parents and students, but not teachers, were "fairly satisfied with achievements in these areas", though parents did rate achievement in "speech" as "fairly low" (C. W. Collins and P. W. Hughes, 1979; 311).

At present about 20 per cent of the positions in the Australian work force can be categorised as unskilled. Undoubtedly these, and probably many semi-skilled, jobs do not demand a high level of achievement in the 3Rs, and practical experience would suggest that the levels of mastery found by Keeves *et al.* (1978), though unacceptable for all sorts of other reasons in a democratic society, are in all probability not hindering either the rate or the level of the present operation of the Australian economy. Indeed, there is more of a case for saying that the schools are failing the economy in the way in which they channel older students in years eleven and twelve than in their treatment of those leaving at the minimum school leaving age. A study, made in 1975, of those in their last three years in Victorian secondary schools found that "at least one third of all students in year 11 were not in a position to take a foreign language or a branch of mathematics in year 12" (STEP' 76, n.d. 3).

The drift from mathematics and science was even more pronounced for girls than for boys. In any society whose economy is marked by a rising emphasis upon science and technology such results must cause concern over the future quality of management, especially when, as in Australia, the rate of immigration, in the past one of the main sources of trained manpower, has been reduced.

So far consideration has in the main been given to basic literacy and numeracy, but in addition to the basic skills and knowledge that is imparted

in schools much about the economy may also be learnt so that the young worker can take up and do his job with greater competence. Thus, much information is taught in Geography and in Social Studies from which the adolescent can build up a mental picture of the nature of the local and national economy and, hence, of the labour market. A study undertaken in two towns in rural Victoria tried to measure such knowledge in secondary students aged twelve to fourteen. About one-fifth of the respondents were either unable or unwilling to answer the questions asked about starting and eventual wages and hours of work, but the majority were able to give very realistic replies indicating quite accurate knowledge of local conditions. (P. W. Musgrave and E. Wind, 1978; 172).

What is disturbing, however, is that the numbers of non-respondents to these questions about local knowledge rose with age. Much of this information is learnt at home, but there were careers lessons in the schools concerned, one of which was a technical school where, contrary to expectations, the students showed the same tendencies as those in the two high schools. Uncertainty seemed to increase with exposure to relevant teaching. Though there may have been changes since this investigation was completed, specially perhaps in Victoria, the conclusions of the Poverty Commission are still probably accurate; they reported "evidence of a gross absence of careers education or guidance in schools, the lack of adequately trained personnel and the failure to include the study of work and career as part of the curriculum", (*Poverty and Education in Australia*, 1976: p. 125). In addition, an unpublished report to the Poverty Commission by the Australian Confederation of Trade Unions found that 31 per cent of its sample of young workers reported that there was no careers literature in their school library or that they had been unaware of it and that 35 per cent reported that they had never discussed careers with their teachers.

This admittedly alarming evidence betrays the tendency for many of those involved at a theoretical or administrative level in this field to discuss the future life of the worker in terms of their own aspirations by focussing their analysis on the concept of "career", a term which is hardly applicable to at least two-thirds of the work force (N. Behrens, 1978; 31-6). Yet, granting this, the question must be raised of how vocational the secondary school curriculum should be. There is considerable disagreement over this matter. Most teachers, unlike many parents, tend to define the curriculum as non-vocational in aim. Thus, in a recent survey relating to specialised secondary schools in Western Australia, when asked what had influenced their ordering of school subjects, "preparation for future vocation" was ticked by 12.8 per cent of teachers, but by 22.5 per cent of members of the community (R. A. Docking *et al.*, 1978; p. 31). Clearly schools must teach certain basic knowledge, much of which is relevant to a young person both, in general, as a future citizen and, in particular, as a future worker, but equally clearly, though some knowledge that enables the adolescent to move easily into his first job must be taught and appears not now to be in the curriculum of most schools, yet even at the purely economic level of argument great care has to be exercised to ensure that the schools do not prepare school-leavers so speci-

fically in occupational terms that they are unable to meet the constantly changing opportunities for local employment.

(b) *Moral Knowledge*. A wide range of moral attitudes is taught, or permitted, in contemporary Australian schools — even perhaps, in those in Queensland, and many of these relate directly or indirectly to later success at work. Examples will be given under four headings:

(i) *The Manifest Academic Curriculum*. Firstly, there are attitudes taught openly in the normally accepted academic subjects. Thus, in Social Studies the attitudes thought necessary to operate a democracy are encouraged, though under contemporary conditions these may include a more critical attitude to authority than some traditional employers willingly accept. Again, in Consumer Education and in Careers Guidance, both subjects now more often included in the curricula of secondary schools, much is taught about the nature of manufacturing and of money that will encourage young persons to work hard when they leave school but also to be wary of what may happen to them both as producers or as consumers. Clearly academic teaching can develop attitudes that enable the economy to operate efficiently, whether because the young persons concerned are supportive or are critical of its present workings.

(ii) *The Latent Academic Curriculum*. In both Science and Mathematics teachers put great emphasis on accuracy and neatness. Although these attitudes are encouraged because of their worth for the subjects themselves they do also have great relevance to the smooth operation of the business. However, as was noted in the case of the manifest academic curriculum some latent effects operate in the opposite direction, that is, to hinder the smooth working of society as it is now structured. Thus, in Social Studies straightforward teaching about monopolies and their profits or about the unbridled use of power by some of our politicians can build up a critical spirit in young persons that is seen by many with authority in industry or by the police as "cheekiness" or "disobedience".

(iii) *The Manifest Moral Curriculum*. Teachers of English have for long had the dual aim of teaching their students both to be literate and to see "good" literature as worthwhile. In pursuing the latter aim they necessarily apply a scale of values to prose and poetry. Perhaps no one has influenced our schools in this request more than the late F. R. Leavis. A great deal of contemporary work, even in the teaching of literacy, follows his tradition, aiming to answer "unsatisfactory" values in written and spoken word and also in the mass media. Thus, students may be set to discover examples of the emotional use of words in advertisements or to read critically *The One Day of the Year*. In either case attitudes may be taught openly that are as critical towards the values underlying our present economy as those that might be learnt in a Social Studies lesson. Ironically, these attitudes, believed by many, particularly amongst management, to be dysfunctional to our society can be

learnt whilst competency in literacy, eagerly demanded by those same persons, is being taught.

(iv) *The Latent Moral Curriculum.* For a century the English public school has taught its pupils to play up and play the game. Cricket, as the Packer affair has shown us, is for many not just a game, but a way of life. Moral lessons are also often unconsciously taught as a result of the way in which schools are organized. Thus, examinations, tests and marks tend to encourage competiveness and the drive to "get on"; relationships between staff and students are structured to teach deference by low status persons to those with higher status.

In sum: various attitudes are taught in schools that may have been seen as helpful or as harmful to a young person's efficiency by his employers. Clearly, however, what is crucial, and it can overrule all the other attitudes so far considered, is whether he is committed to work and to the present political and economical systems.

Commitment

(a) *Commitment to Work.* As Early as 1864 evidence can be found in Britain to show that the ruling classes saw education as a form of idleness that prevented children from learning the virtues of work (*R.C. on Children's Employment*, 1864; pp. 187, 198). More recent British ethnographic data would support this view that under some circumstances schools teach future workers to be idle. The following conversation between a research worker and two adolescent boys makes the point clearly:

Researcher: What's the last time you've done some writing?

Will: When we've done some writing?

Fuzz: Oh are, last time was in careers, 'cos I writ 'yes' on a piece of of paper, that broke me heart.

Researcher: Why did it break your heart?

Fuzz: I mean to write, 'cos I was going to try and go through the term without writing anything. 'Cos since we've cum back, I ain't dun nothing (it was half way through term). (P. Willis, 1977; p. 27).

In a democratic society sheer power can not be used to coerce workers, young or otherwise, to work. During the 1950s and 1960s a view was born in many capitalistic societies that the working class were growing more middle class in their attitudes. The British Prime Minister Macmillan's words "We're all middle class now" were reflected in the views of many in other similar societies and proved an especially attractive hypothesis in Australia of "the Menzies' Years". However, recent research and practical experience have discredited this view. British evidence (J. H. Goldthorp *et al.*; 1968-9) and Australian experience would suggest that workers are not learning middle class economic norms associated with striving for promotion, a loyal allegiance to an employer or the so-called professional attitude to work. Rather

they are willing to work hard in order to consume hard. As one British adolescent put it, "It's just a . . . fucking way of earning money . . . nobody does a job for the love of a job." (P. Willis, 1977; p. 100). The "old bomb" at one level and the beach cottage at another are seen as available to the Australian worker in exchange for long hours of uncongenial toil.

The point of beginning this discussion of commitment to work by a reference to 1864 should now be clear. The problem is an old one in industrial societies. Yet there is no reason to believe that young workers are any less committed to work now than was the case in former times. The studies undertaken for the Poverty Commission in their view "demonstrate the desire of adolescents to become competent in ways that they consider to be important" (*Poverty and Education in Australia*, 1976; p. 142). Admittedly this conclusion refers mainly to apprentice-type jobs, but even under adverse circumstances some of the unskilled workers who were interviewed "clung tenaciously to work as something meaningful and worthwhile" (idem; p. 143). It is, however, very much easier for a young worker to maintain a commitment to work, fostered at school and at home, when he has the opportunity for regular employment than when he is faced with a succession of temporary and boring jobs. One Melbourne youth in the latter category told a research worker that it was "all a waste of time. I'd given up" (idem; p.145). The situation of those persons who always were or recently have become uncommitted to work poses the politically more important question of whether they are any longer committed to the present economic system which has in so many cases totally failed to meet their expectations of a minimally interesting job, the remuneration from which will meet their needs as a consumer at presently expected levels. Ironically, many of these needs, particularly those that are often termed conventional needs, have been created by the economy itself.

(b) *Commitment to the Economic System.* Until the first world war, and even perhaps, despite the high unemployment of the interwar years, until the mid-1960s the model member of the working class was seen by the ruling class and by himself in terms of what has been called " 'Rochdale man', the respectable and self-helping, self-educating working man with his co-operative society, savings bank and chapel" (M. E. Rose, 1977: p. 185). There were those who did not meet this model and in extreme cases force was used against them. As Menelaus, one of the great late nineteenth century industrial managers, put it in the early-1890s, "I do not think that without the goal in the background we could properly conduct the works." (*R.C. on Labour Laws*, 1894; Q. 513).

In Australia despite forceful early activity by the trade unions something of the same model was imported from the mother country. More recently the new British ideal of 1945-50, "Beveridge man", has been influential. This model man helps himself within the range set by, at the lower end, a relatively high welfare net, sustained by full employment and, at the upper end, a high marginal rate of personal taxation and the opportunity to leave his social class of origin. More recently, in both Australia and Britain, the structural bases of this model have been eroded by increasing unemployment and by,

on one side, left-wing and by, on the other, Hayek-ian critiques of welfare capitalism.

One of the crucial contemporary cultural problems facing schools in these circumstances is how to ensure a real measure of commitment to some version of our present economic and inevitably because of the nature of the critiques, political systems whilst at the same time indicating to students what no rational being can ignore, that major changes are needed to meet the present dysfunctions of our economy. This problem may be rephrased in terms of how, and indeed whether, the schools can ensure the formation of a critical spirit that enables future citizens to keep up pressures for change at the same time as they meet the admitted demands to keep the economy operating to support the present standard of life. One of those who worked in the Liverpool (U.K.) Educational Priority Area in the late 1960s has expressed well this need; in discussing the development of a community-oriented curriculum he speaks of "a compassionate, tolerant and critical examination of all social, political and moral issues" in order that a community should radically be reformed and . . . its children, as junior citizens, should be forewarned and forearmed for the struggle" (E. Midwinter, 1972; pp. 170-1).

Under rapidly altering economic and educational circumstances teaching towards rational discussion may be the only way open to a society, apart from revolution, whether from the left or the right, to ease changes in its social structure in order to meet the changing power of political interest groups. What then, are the relevant economic and educational changes?

The Changing Nature of the Economy and of Education

(a) *The Changing Economy.* In Australia, as in most developed capitalist countries, the rate of economic growth has fallen greatly. Simultaneously the post-war era of full employment has ended. In the past when such economic conditions have occurred deflation has inevitably followed. Now, probably due to changed political circumstances, symbolized in the power of the trade unions, and to massive dislocations in the supply of primary resources, especially oil, upon which much past industrial growth has depended, the existing inflation has continued.

Such stagflationary conditions have forced a questioning of the direction of much social expenditure, particularly in relation to education. In all industrialised societies the rate of educational spending, usually seen as an investment in the future, has as a result been curtailed. In Australia the migration programme, in effect a means of substituting the educational investment of another country for one's own, has also been greatly reduced.

Yet the growing reliance of the economy on science and high technology is not in doubt. The tertiary sector of the labour force, relevant in this context and always high in our entrepot economy, was 50.0 per cent in 1911, 60.1 per cent in 1961 and 68.0 per cent in 1971. Shortages of highly educated labour can hamper the smooth working of the economy; Britain had to

bring clerks and chemists from Germany in the late-nineteenth century to overcome possibly damaging shortages of highly educated manpower. At the present, however, it is usually thought to be training, rather than education, that is short in the Australian labour force and the links to the educational system are being now strengthened to meet this perceived need.

(b) *The links between the Economy and Education.* The growth of the tertiary sector of the labour force has resulted in a great demand for workers with formal educational qualifications. Students, parents and others have come to believe that there is a direct connection between doing well in life and formal qualifications. The demand since the war for such credentials has grown very strong. However, a major study of this link in the U.S.A. between 1941 and 1961 has shown that, except for a small proportion of special cases at the top of the labour force, the rise in standard of formal qualification at each level was not due to demand from the economy, but to the supply of qualified persons emerging from the educational system. (J. K. Folger and C. B. Nam, 1964.) Management has been able to use the greater supply of credentials to ration out applicants for jobs so that the educational threshold to the economy has risen.

In Australia education has always been defined instrumentally. The comment of one mother in rural Victoria sums the present position up neatly.

> They definitely need an education these days, don't they? Matriculation once used to be a really good education, but it's not now. (P. W. Musgrave and E. Wind, 1978; p. 176.)

Competition for qualifications in a society where there is a strong belief in equality of educational opportunity has begun to make formal education more readily available so that the number of graduates at all levels has risen. Thus, not only tertiary graduates are today unemployed, but secondary graduates who can not gain the level of job to which they aspired when starting their courses.

At present about a quarter of all early leavers in Australia may expect to be unemployed six months after leaving school. What is the connection for such young persons between school and work, when work itself has no reality? The new question that has to be asked is: how should we define work in the life span of many young workers? Can we any longer continue to think in terms of worthwhile full employment for all? One sociologist (J. Hearn, 1977) has begun the process of defining concepts that allow a new analysis of this question. In relation to workers who no longer believe in work, but still have hopes for the future, Hearn speaks of "the Uncareer". An active youth with such views might create alternative activities outside the formal economy — support structures for such activities were suggested in the Williams Report (R. T. Fitzgerald *et al.*, 1979; p. 366-76), whilst a more passive person makes his life more meaningful in a series of boring jobs by various forms of dissidence, perhaps towards authority. A second relevant new concept is that of "the Noncareer". For some neither work nor the future holds any worth. A passive adaption to this situation would be to go through the motions of work when a job is available; a neutral response might be to work in this alienated manner, but to make one's real life outside

work. However, a creative response might be to get out of the work force completely and to adopt an alternative life style. The crucial point is that more adults can opt for creative noncareers in our society because the economy can supply a slowly rising standard of life without employing all the workers who are available to it.

(c) *Relevant Contemporary Education Change.* Such persons are now seen as deviants, but they should welcome the contemporary trend to see education as a service to be supplied in its own right, as a consumption good, as much as an investment future. They should also welcome many recent curricular developments. Thus, many teachers now believe that school curricula should open up more chances for choices and for leaping over traditional subject boundaries. Such a curriculum, provided that it is based in a sound core, would have an economic pay-off in that any general education can form the basis for ease of movement both into uncareers and between jobs and for adaption to technological change.

Furthermore, the difficulties implicit in teaching wide curricula are now less than in pre-war days when the teaching force as a whole was not so well prepared. Better educated and less rigidly trained teachers can both cope with wider curricula and also adapt their teaching to meet local circumstances more easily. However, such a teaching force has also more desire and power to criticise the workings of the bureaucracies which established the Australian state educational systems. In part as a consequence teachers' professional bodies have become powerful.

These bodies have given strong support to the political drive for more equal educational opportunities. At this point one of the major political conflicts for the future emerges. Our educational system is expected to carry out many functions today, but most interest groups demand that it guarantee equal educational chances to all young people so that they may succeed in later life at a time when the economy can not provide the chances for them so to do. Indeed, the young are already adapting to this circumstance by choosing alternative ways of passing their lives in permanent or temporary uncareers or noncareers. Yet, the older generation defines this understandable and rational adaption in a dated, but very Australian manner as "dole bludging". Is there any solution to this conflict? Clearly these problems are in the main political, not economic, in their nature.

Conclusion

The question given to me, and the one usually addressed, concerns whether the educational system is helping or hindering the economy. The only answer possible on the available evidence, some of which was quoted earlier, must be that at present and expected levels of economic activity, except perhaps in relation to some managerial positions and an under-emphasis on careers work, the educational system is not and is unlikely to hamper economic efficiency. Indeed, the reverse case may be argued: a higher rate of economic activity would create more wealth, some of which could be spent on education so that all might ultimately benefit.

Under contemporary and likely economic conditions the question asked is, however, the wrong one. Apart from any humanisation objection to over-concentration on the economic function of education it totally ignores the crucial relationship between education and other social institutions, and more particularly with the political system. The important question to which we ought to address ourselves is this: at a time of major economic change how can we ensure politically competent citizens who are committed to the survival of a viable democratic Australia? Any attempt to answer this question will demand consideration of the academic and the moral curriculum of schools. What knowledge and skills, and what personal qualities are needed to ensure rational choice amongst alternative economic and political structures? What are we to mean by work and by leisure, and what are the relationships between them to be in Australia in the next generation?

In 1979 sociologists of education, largely in answer to questions given them by politicans and administrators, are trying to answer problems about the different opportunities available to each social class to succeed in education so that they "get on" through their jobs. Will their successors in 2009 be asking equivalent questions about the differential social class chances of moving into a noncareer? And will the middle class once again prove more successful at creative adaption to new economic circumstances?

My thesis is that Australians must stop seeing the link between school and work as the focal relationship. This link is working not perfectly — nothing ever does in a free society, but at least reasonably well and many existing social forces will force improvement where deficiencies exist. We must begin to redefine work and create our new view of work and of leisure to education so that we can evolve some policy that is appropriate to the probably economic circumstances at the start of the second millenium, a date when those leaving school at the end of this year will still be only thirty-five. But above all we must initiate the discussions that make possible the political decisions that will ensure commitment to a new social reality, which as always, again given definite political decisions, we ourselves shall in large part create.

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DISCUSSION

Selected Comments

Professor Taylor

I've been surprised at the relative lack of that challenge here during this conference. Maybe I've not been in the group sessions at which it's come up. But I think any treatment of a similar theme in the U.K. or in Europe almost certainly would have produced (and I'm giving an opportunity for this to be corrected) a stronger challenge, especially from some of my Marxist and neo-Marxist friends, to the values of contemporary society. You see, I hoped that what came through — perhaps not in the half hour this morning, but I hope in the presentation paper — was that although I greatly value myself the contribution that Marxist analysis has made to this — and I think the neo-romantic Utopian radicals have also contributed a great deal to our ideas — I think that my remarks about ice-cream barrows, derogatory as they may seem, really sum up my position. I don't see that either group have really got any solution which is capable of being applied as part of a political process that would retain your freedom and mine. And since the thing I value above all else is the ability to sit here and say what I think without having to go out and worry about who's taking it down and going to use it against me, I would have thought that that consideration is a pretty major one. One of the assumptions that's often made by those who would make this radical critique of society seems to be that everybody has some kind of right to an interesting job. Now, I don't want to appear unkind here, and it's very nice for us sitting here. I happen to be very nicely placed, as I said at the beginning of the paper, and so are most of us; we're the successes of the system; but the fact is that there is a trade-off as I see it between the advantages, the gains, from the division of labour which enable us all to live in a way that is utterly different, totally different from that of our predecessors. Add the interest that we can claim from our employment. I imagine the cave-man hunters had work that was extraordinarily interesting, in the sense that it kept them busy all the time, they were fully engaged, they were so hungry that there wasn't much chance to think about boredom, alienation, powerlessness, meaninglessness and all these things. But, by golly, I wouldn't swap with them.

Mr Polites

No, I don't want schools not to train people to question and be challenged, and I don't think there are any such things as values of employers anyway. If you've ever been to an employer's meeting you'll find that there are as many opinions around that table as you can find around anywhere else. It may vary from the extreme right to the extreme left — never forget there's a right and left wing in every movement whatever it is and there's a right and left wing in the employer's movement in that sense. But I don't think it's good enough for the education system simply to say 'We'll teach you how to do all the questions, or ask all the questions,' without trying to say what the alternatives are, and what might be some of the answers to the questions. In my view, I share what Professor Taylor has said about the system we

live in. Of course it's not perfect, of course it will change, and it might need change, and it's in the constant course of change, but at the same time nobody has yet shown me one in my experience which has given us the same sort of individual liberty and freedom that we've got. That is a value you have to trade for. And for my part, I think that we shouldn't pretend that the alternative lifestyle will produce a millenium, as some people seem to think. And therefore, I think that the education system needs to give some attention to telling people that work is going to be done, and that you simply just don't opt out or that you shouldn't have to do this because when we change the political and economic system you won't be required to work. Now I've visited a couple of places which work under a different political and economic system, and, my God; I prefer to work here, with all the inhumanity of our employment, than some of those places.

That's what I think is the answer. There ought to be an evenly balanced point of view about what the alternatives are and what the chances of success of the alternatives might be.

Professor Taylor

I can only speak from the U.K. base, and I'm sure you've had parallel work here, of the kinds of career education packages that are emerging from the thinking of people, and I've had some very good people at somewhere like CRAC — Careers Research Advisory Centre at Cambridge, from the Schools Council Careers Advisory Project, which include what I've indicated in the paper — not just employability skills but also adjustment skills, survival skills and a whole range of skills and attitudes which will not work for any one person in a perfect sense, but may provide a package out of which they can extract something that can be of use to them. More fundamentally, however, I do detect a certain clash — and I expect it's inherent in the nature of the commitment we've made to education and the imperfections of our society — between the educationists' values and the values of the work place. In a sense there's no way in which we can rate within the cash nexus — the halting poem of the difficult child who has at last found the possibility of expressing himself in writing — the first home run of the unathletic child. I don't need to go on; there are enough teachers in the audience and ex-teachers to know what I mean. There is something intrinsically worth while in that there is something life-enhancing, something developmental in that, and many of us who've taught and know that, feel sometimes a sense of frustration that within months, these children — no, not children, these young people — are going to be in work places where there is a strong possibility that that sort of intrinsic value will not receive any recognition whatsoever — that the values they will encounter will be *not* life enhancing in quite that way. Now there is something, I think, intrinsically different here, between the educationists' values and the values of the work place. I think they are capable of being reconciled through appropriate careers education programmes. It's well illustrated by that story of the Soofy who met a boy on the road, crying. And he said to him, 'What ails thee, my son?' and he said, 'I weep for my mortal soul.' And the Soofy wished him well and went on his way. And the next day he met him again, on the same road, and he was still crying and he said, 'Why do you weep now, my son?' and he

said, 'I weep because I am hungry', and the Soofy said, 'Ah, I thought it would come to that'. The employer has a right, I think, to challenge us on that ground in the schools, but we have got to eat, we've got to work to eat, most of us. Some of us have got to work a little harder than others if *all* are to eat, perhaps.

I leave the whole thing open ended — I've said nothing to reconcile it this morning, but I think good careers education does do something to reconcile that set of values. But it can't just be in the schools. It's got to be humanized in the work place. It's got to be in terms of a workable industrial democracy which mustn't be the prerogative of the political left. The political right has got to pay as much attention to industrial democracy of a sensible kind if we're to hold a capitalist society functioning. It's got to be a mutual business.

Professor Taylor

I'm still worried, though, about the nature of critical dialogue, because it isn't a matter of the school adjusting to what is being demanded in the work place, nor is it a matter of the work place accepting what we provide from the schools. The nature of that critical dialogue is I think, itself critical to the whole process. Where I think I would disagree is over this business that people aren't dissatisfied — I think it's perfectly true. I think Professor Strauss brought it out the other day. There are some facts in my papers that show the level of satisfaction is surprisingly high. That doesn't tell you anything really. It merely illustrates how wonderfully adaptable the human being is. And that's the secret of our success.

It's simply because of that capacity for adaptation. Now, the key questions come, and this is where the philosopher and the churchmen have got to come in — we can't leave them out. What sort of model of man is an appropriate one? What are the potentialities that can be developed within a particular system that will work? Now, I think where the intrinsic difference comes in, between the educators' values and the values of the work place, is that we perceive, I think, in our teaching, we sometimes have that moment of experience. You can't describe it — the poet can get to grips with it, so can the novelist sometimes, and the artist, but you can't do it in this sort of discourse, where you realize there is a quality of human potential in the people you're working with in a school or a college — a quality that transcends the whole business of work and employment and the day-to-day minutiae of personal relations. And you perceive something of the truly personal. (It depends on how you want to put it; it depends on your religious belief or whatever, and I don't want to start getting pious this morning, it's the wrong day, but somebody said we've all got some kind of religion — at least we all know the kind of church we're staying away from). Leaving that aside, the perception on the part of the teacher in the teaching situation which has unique qualities is different from the situation of the supervisor and the workman, different from the manager and the employee. The teaching situation has unique characteristics, I would argue. We all see at times perception of the potentiality of human beings in that situation and the realization that that's as far as it's

going for that child; that's as far as it's going for that group because of where they live and the kind of world we live in.

I would suggest that it's not just a response of the educator to the employer that's required here. There's a critical dialogue in which we try to bring home the essence of that teaching relationship which is unique to our kind of social setting.

CONFERENCE REVIEWS

REVIEW 1

Mr David Bethel

Now, what was the purpose of the conference? And secondly, was this purpose achieved? Well, as I understand the purpose of the conference, it was, in the words of Dr Browne, the President, last night, to pursue the role of the College as the intellect and conscience of the teaching profession and to investigate and dissect, open up a debate on, the relationship between education and the world of work. That, as I understand it, is essentially what is the purpose of the conference. Was the objective of the conference achieved? I think this can only be answered by each and every participant because essentially the conference was for the individuals. But whatever happens, I suspect that we will part in a way in which we are all more equipped to think through with clarity the problems facing us all in our daily tasks. The problems of education are multifarious; of that there is no doubt. No longer, even if it ever was, is it a simple matter; nor is it perceived as a simple matter. This is simply because the problems of society, of course are multifarious. It would appear that the complexity today is more manifold than in the past — that's my perception. I think this is because for the first time in human history, the definition of a civilized person, a civilized society, is that it must be one concerned with all its members. This has happened only recently.

It is easy to think back to the Greek ideal of democracy which begat the name, and forget that the Greek society was based on a slave support system. This doesn't happen in that kind of way today — although some people would have us believe that society has its kind of slaves. I think that is not so, but perhaps I could be an optimist. Now at the same time, the rate of change in technological developments is such that we're likely to have material benefits which no previous generation could even conceive. What we don't know, it seems to me, is how to organize society, how to organize education, in ways which will maximize the benefit of this technological change for everybody — and I mean everybody. Put another way, we're not conditioned at present by our education, by our cultural values, by our ethical values, to organize a smooth transition from the second industrial revolution to what has been called the post-industrial era. So, in this process, hiccups occur. The distressing hiccup is unemployment, and youth unemployment throughout the world in various degrees. To some extent this theme dominated the conference in its early days. The idea that education was a preparation for work was brought out. Some thought that we need to think differently, that we should be preparing people for life. That's a cliché, and I think it is a cliché. We must beware of clichés and I suspect that what we haven't got yet is a real conception of what the quality of life should be — what we would like and how we mix in various components — education being an extremely important component, into this mixture. How can we mix these things in to get a happier, more productive life for each individual? Without doubt, to my mind, the conference has done two main things. It's

sharpened our perception of the problems that are inter-related, inter-linking. Education, the economy, social conditions, and values in society are all inter-linked.

Secondly, it's allowed us all to share the experience of a number of people from this country and abroad who have given particular attention to the various problems. I think it might be invidious to single out any particular person by name, but I'm going to do it, and I must say that the approach of Minister Jochimsen impressed me enormously. I found this extremely illuminating. Now that's not to say that the German mode can necessarily be exported anywhere, but I think what I learnt was that there can be no solution to the socio-economic problems without clear analysis — without a political consensus and without some act of faith and conviction that what you're doing is absolutely right, having tested it out in a kind of public accountability. I think too, as a matter of fact, it's a matter of great congratulations to the College that they were able to get a cabinet minister from another country to spend sufficient time away from his desk to share his thoughts with a conference like this. It doesn't happen very often — perhaps we should try to get more cabinet ministers from more countries to come and share thoughts with us.

I believe there are many lessons that can be learnt from his talks. The central thing; it seems to me, is that education is no abstract concept divorced from other human activities. Education in other words is life. And that reminds me of a little story that Yehudi Menuhin told me about Red Indians. It goes like this: the Red Indians on a reservation in America were working away happily and had many contacts with white people around them. Great empathy grew up between the two societies and the white community around wanted to do something for the Red Indians to show their gratitude. So they decided to have a whip round, get some money, have some scholarships, send some of the Red Indian braves to university and give them a university education. They went along to the Red Indian chiefs and explained that this is what they'd like to do. The Red Indians were very courteous and said, 'Well, may we think about this?' They thought about it. After a few days they came back and said, 'We're very very grateful indeed for your offer. We understand that the thing you most value in your society is a university education and you're offering this to us free. Thank you very much, but I'm sorry, we just have to refuse. You see, we *have* had one or two of our young men go off to university before and when they've come back, well, they've been rather useless. They've not been able to hunt for fish, or skin animals. However, we are so touched by your offer that if you like to send some of your braves to us, we will teach them how to hunt and fish.' Well, education is about life, and as life changes we've got to be prepared to change our educational concepts to fit the changing needs of society. I suggest that there's no society in the world that has done this at this moment. We're fumbling towards trying to make a better match of education and the needs of society, and the question arises, 'Have we institutionalized our education, our learning processes, successfully?' And if the answer to that is 'No', and I think it is, or not entirely so, then we need to be prepared to rethink and try to change. By 'we' I maybe arrogantly speaking for most of the western world. In most western

countries, we seem to have approached primary school education rather successfully. As I go round the world, it's the primary system which impresses me. In no country, including my own, of course, is the secondary education system as impressive. It suggests that, for the complexities of young people growing up, we've not got the education system right.

In the tertiary sector, we've not got that right yet, but there are indications of change, and I'm extremely interested to know exactly how the colleges of advanced education in Australia work, because it happens to be my conviction that this alternative higher education system is likely to be moving towards matching the needs of society, not necessarily the needs of industry or whatever — society as a whole, including industry as an important part — matching the needs of society with an educational process which is more appropriate than that which has been developed over some centuries for another purpose. So, I congratulate the States and the Australian Federal Government in introducing this alternative kind of system and many of us throughout the world are watching to see how this is working out because we believe some of our problems can be solved by looking at this.

So I think we've all got to look forward to the fact that there are going to be more changes, but to accept the fact that change is normal. One looks back with a historical perspective — change has always been the norm. The only thing that's different today is the accelerated rate of change, and we've not found it easy to adjust — not to change itself, but to the variable rate of change. This is something we have to learn. I'd like to end by saying I'm sure every participant will go away with a better equipment for facing problems, for thinking through problems and contributing to their solutions.

REVIEW 2

Mr Grant

I came to the conference with a desire to learn, yet with certain preconceived ideas of what I thought education and the world of work was all about. And what I've heard and what I've read in the contributions in the last few days have confirmed my views, but I suppose what's happened is that I've interpreted these things as confirmation of my preconceived ideas. However, I didn't hold out much hope for the fruition of these ideas. Now, having heard all these discussions, I'm pretty confident that really it all will happen. Professor Jochimsen spoke of the recent transfer in the administration of the industrial training in his country from the labour and economics department to the education ministry. Now, we could argue the value of this sort of thing happening in our country, but I see it as giving an indication of the degree of dialogue that existed between the educators and industry in the country and that's something I would tend to support happening here.

Students of business and management — and I'd like to include myself there — have been reading for years about the advances that have been made in Germany in the relations of productivity, determination, quality of work life, and the relative industrial peace they've been experiencing there. From what Professor Jochimsen related, I make the inference that the education system there is making a substantial contribution to this state of affairs in his country — the country which, as he said, has a very low unemployment and, I gather, a relatively low inflation rate. Now in marked contrast to this, Justice Mary Gaudron in her paper reflected the dearth of management expertise in our own country. It's my personal view that this lack of management expertise that is making a substantial contribution to the industrial chaos in this country is leading to the crippling of the economy, and producing what is really the antithesis of the situation in Germany. Now I'll stick my neck out again and say that I believe that educators must bear some responsibility for this management ineptitude. How can schools of business studies hand out 10 commandments for good management unless their staff have had recent and significant experience in industry? If they haven't, well at best I'd suggest they could merely suggest 10 points for keeping the office tidy. Mr Sampson's paper reported on the work of experiential education of students in America in the liberal arts and in management, and he pointed out, I was very happy to notice, that already this had begun in Australia. We have people being trained as managers, spending part of their course time working in industry. I'd like to project into the future — I'd like to think that there'll come a time when I was interviewing and recruiting graduates that I could choose not to interview the business graduate who had not participated in some form of experiential learning during his degree course. Let's hope that sort of thing *could* happen.

I understand it costs about $30,000 to produce a graduate in this country — a business graduate or anyone for that matter. That same person, in two or three years, could make decisions or introduce some sort of activity in his business which could cause his employer and the economy several times that amount of loss. Now in the light of these figures, whoever pays for the undergraduate while he's undergoing this work experience, and how much

he's being paid will to my mind be relatively insignificant issues. Professor Taylor spoke of signalling systems in his formula for making education realistic in relation to the world of work. Such signalling systems would enable the educator to relate to the changes in the labour market and it would enable employers to relate to the changing needs to be met in training and development — activities for which they are responsible. To quote the last paragraph of his paper: 'At present, the discourse of economists, sociologists, specialists in instructional methods, enterprise managers, policy makers and guidance specialists show very little awareness of a common problem. Examine the bibliographies and articles in books produced by authors from these various fields and you find very little intercitation'. So we have a problem. I work in the retail trade. Now if our merchandise doesn't meet the wants and needs of our customers at the price they're prepared to pay for it, we'd go out of business. So we have to use advisors to find out what the needs and wants are, and what prices people are prepared to pay. I'm going to be so bold as to suggest that possibly some of our techniques could apply to this particular context.

Professor Dunphy stated that at the core of society there is an economic base. Obviously educators are becoming more aware of such a fact of life, and our education system is changing accordingly. However, I believe more can be done in the way of exposing secondary students to the work environment through work experience. It seems to me there could be more efficient ways rather than leaving the organization of this work experience to the individual headmasters and the careers development officers. I found it very encouraging to hear such frequent references to continuing education throughout one's life and I suspect it's the responsibility of organizations such as I represent — the Institute of Training and Development — to sell this concept to management, which should promote it and, in some cases, fund it.

REVIEW 3

(Presented at the Penang Seminar, September, 1979)

H. S. WILLIAMS

I have two objectives in presenting this paper to you this morning. The first is to give you some background on the current issues as they appear in Australia with respect to education and the world of work. The second is to pass on to you something of the 20th Annual Conference of the Australian College of Education which has just taken place in Perth, Western Australia, and from which the Australian members of this gathering have come to meet with you in Malaysia.

In pursuing the first of these objectives I think it would be helpful to give you a little history of the education system in Australia as it relates to our topic and of some of the current developments which have sharpened community concern in this regard. I should point out that education in Australia is a State responsibility. For the sake of brevity I must therefore make some generalizations which will of necessity not reflect the diversity which can occur from State to State.

Secondary education in Australia, which covers a maximum of five to six years in the various States, with pupils' ages ranging from about 12 to 17 or 18, has largely been a general education with a somewhat academic bias. The proportion of students remaining for the full secondary course has been increasing, particularly among girls. From 1967 to 1977 the proportion of all students entering secondary education who remain in the final year has risen from 26.5 per cent to 34 per cent. Among girls the rise has been from 19 per cent to 36 per cent. A considerable proportion of secondary students, however, leave at about the age of fifteen, which is the minimum school leaving age in most States.

Historically, secondary schools provided for those going on to higher education. In more recent years there have been changes to cater more effectively for a wider range of students and their individual needs. At the same time, competition in the labour market, combined with the tendency for employers to select on performance in the basic and more traditional subjects, has meant that streaming of students into different areas of study now occurs later in their school careers. In the later years of secondary school there is a much greater variety of subjects than there used to be. Some of the newer subjects are job oriented but the majority would be directed towards personal development and citizenship.

Up until the 1960s, education beyond the secondary school was through universities, teachers colleges, or technical education. In employment terms the universities were, of course, largely concerned with students preparing to enter professional occupations. Technical education, which provided for those entering trade and other skilled occupations and technician level fields, was largely on a part-time basis. Skilled tradesmen were, and still largely are, trained through apprenticeship under which the student is indentured to an employer, traditionally for five years. This is now changing, with a

reduction of the apprenticeship period in some instances for those with better-than-average education or those who have completed a pre-apprenticeship course of training in a technical institution. The apprenticeship period for some of these today would be reduced to as low as three years. Technical training during apprenticeship is undertaken on a day-release or block-release basis. Many apprentices and tradesmen undertake technician or post-trade training in evening courses. Workers in clerical occupations substantially undertake their studies in the evening also. There is, however, some trend towards more full-time courses in technical and further education, though still only 5 per cent of total enrolments would fall in this category.

Following the Second World War, universities in Australia turned more of their attention towards research. There was a growing feeling in the community, no doubt emphasized by the industrial and economic growth which was taking place, that there was not sufficient provision for the education of practitioners at the professional level. There was also the somewhat worldwide view at that time that increased education, particularly of a vocational nature, was a significant factor in creating economic growth. Professional courses, again quite substantially part-time, had been developing within a number of the major technical colleges following the Second World War. A major report commissioned by the Commonwealth Government, and published in 1965, recommended that these professional courses, and some senior technician courses based on completion of a full secondary education, should be expanded and separated from the technical colleges to form what subsequently came to be known as colleges of advanced education. To these in 1973 were added the teachers colleges. Colleges of advanced education were initially jointly financed by the Commonwealth and the States, as with universities.

There was in both colleges and universities a tremendous expansion over the period from the mid 1960s to the mid 1970s. Enrolments in universities and colleges of advanced education rose from about 150 000 in 1960 to almost 250 000 in 1974. Measured as a proportion of the age group from 17 to 22, these figures represented a rise from 10 per cent in 1960 to nearly 18 per cent in 1974. In 1974, the Labor Government removed all fees for higher education and generous student allowances were provided based on need rather than on educational achievement. Students had, of course, to meet the entry requirements of the educational institutions. The Commonwealth Government also accepted responsibility for the total funding of higher education. This full flowering of the enthusiasm for higher education was to be short lived. The year 1975 saw Australia running into serious economic difficulties. Unemployment, which had been around the 2 per cent mark rose to a level around 4 per cent. Inflation took a heavy toll. Perhaps it is not surprising that in this climate, confidence in the capacity of higher education to lead all its graduates to well-paid positions and the country to higher level of economic success died fairly rapidly. In 1975, decisions were made to hold all further developments in higher education for 1976 and to review the whole situation.

Since that date the atmosphere has been one of continuous constraint on growth and development in the colleges of advanced education and the universities. Increases in student numbers have been relatively marginal and

financial resources have progressively been reduced when inflation is taken into account. Quite apart from the restraints applied by governments, there has been a decline in the demand for higher education with the levelling off in the numbers in the relevant age groups and, as might be expected in the face of declining employment opportunities, an increasing disillusion among prospective students.

In the meantime there has been a growing feeling that technical education has been overlooked in the rush for professional qualifications. The funding of technical education has remained largely a State matter. Some assistance with capital expenditure and with student allowances had been provided by the Commonwealth for quite a few years, and in 1974 a committee was set up by the Commonwealth to study the needs in this area. This resulted in the Commonwealth providing additional funds to supplement those of the States in providing buildings for technical education and some assistance to improve the quality of education provided. However, the succeeding tight money period has meant that the additional assistance has had a limited impact on the deficiencies in this field, particularly in the face of the substantial growth which has been taking place. One of the deficiencies has been the lack of planning data so that it is hard to make any comparison with figures in higher education. However the number of students engaged in technical education in Australia has increased from 508 000 in 1973 to 870 000 in 1978.

Growing concern with unemployment and statements being made that a lot of this was due to the failure of the education system led the Commonwealth government to set up in 1976 a committee on 'Education, Training and Employment'. This committee reported in February, 1979. It concluded what some of us had felt for some time, that education was being made the scapegoat for the problem of unemployment which was largely due to economic and social factors. These include the general climate of international trade, inflation, technological innovation, the increasing participation of women in the work-force, and various structural changes, in addition to the internal economic problems.

Education, however, continues to come under public criticism, particularly with respect to the development of numeracy, literacy and attitude to work, despite the fact that research into literacy and numeracy reveals no evidence of a decline in this respect. In fact, of course, many more students have gone on to much higher levels of education in recent years. However, there is a view which is perhaps more supportable, namely that numeracy and literacy are not increasing in step with the needs of our modern society and that greater attention should be given to these basic needs. There is also a well-supported view that young people do not have an adequate knowledge of the alternatives available to them in work, and the nature of work demands. Increasing attention has been directed to the transition from school to work through improved guidance, and better opportunities for work experience and observation.

Apart from these issues there is also a frequently expressed opinion that education should be more directly related to the jobs available. Attention is often drawn to the excess of graduates which has become evident in some

areas, particularly teaching, although the evidence is that graduates are much more successful in getting jobs of some kind than those with less education. Unemployment among graduates is running at about 4 per cent compared with over 20 per cent for those aged between 15 and 19 and an overall figure of 7 per cent. While manpower planning in the form of predicting manpower needs is a popular idea with the public, all those who have examined the experience to date in this area are aware of the very severe limitations of this technique. The fact is that, particularly in areas involving lengthy preparation, the hazards of trying to predict three, four and five years ahead in a situation subject to so much economic and structural change is extremely hazardous.

It was against the background of growing unemployment and increasing criticism of education that the Western Australian Chapter of the Australian College of Education proposed the topic of 'Education and the World of Work' for this 1979 Conference. What happened in the meantime and the deepening problems in this area have certainly added to its significance. However, we thought to take a broader approach to the problem than might be implied by what I have so far had to say in which the emphasis, in a sense, has been on education and youth unemployment. This certainly was a major factor in triggering off interest in the topic, particularly among the public, but it is only, as we see it, one aspect of the whole. Let me make some propositions supporting the wider view.

Firstly, you will note that the topic is 'Education and the World of Work', not 'Education for the World of Work'. Too often this topic is discussed as if the requirements of the world of work are clear and unchanging, with the assumption that it is up to education to meet those needs. The fact is that the needs of the world are constantly changing in response to a greater variety of influences, many of which cannot be predicted, including political decisions such as those giving rise to the recent oil crisis. Education, for its part, has other responsibilities to its students besides preparing them for the world of work, and the world of work is itself partly influenced by changes that occur in education. For instance, the increase in higher education in response to popular demand changes the kind of work-force that is available and changes expectations with respect to work. This applies not only to the kind of jobs that are sought but also the satisfactions in work and the way it is organized. So we have two important aspects of our society, education and work, between which we must seek a reasonable relationship, but each of which has its own independent objectives and its own elements of change. We were anxious that our Conference should emphasize that the relationships between education and work are not one-way but two-way.

Secondly, we are beginning to appreciate that education is not only for the young. In fact, some would say it is wasted on the young. Increasingly, people of more mature age are seeking educational opportunities. The age range of students in higher education, for instance, is constantly rising. Education plays an increasingly important part not only in getting into the work-force but also in getting on in the work-force, keeping the worker up to date with developments in his field and providing him with the means of advancement. We therefore wanted to look at the relationships between

education and the world of work over the lifespan, and not only in educational institutions but also in the many other places in which learning takes place.

Thirdly, if work demands are going to decline in our kind of society, as they have done progressively over the centuries, then education can have an important part to play in enlarging and enriching leisure-time activities which might encourage more of us to spend more of our time that way and to share around the available work, thus helping to solve the unemployment problem. Indeed it would appear that we cannot solve the youth unemployment problem apart from solving the total unemployment problem, since unemployment among young people has consistently, over the last 15 or 20 years, been about three times general unemployment. The two clearly move together.

Fourthly, we felt it important to emphasize that education is not a matter for the educators alone. It does not take place only in schools and other educational institutions. It is the public which decides what resources will be made available for education; it is the public which decides what kind of education it will seek. If there is a wide discrepancy between what is taught in the schools and what is taught in homes and in the society, then the school cannot have much effect. There are many people in the society who have a contribution to make to education as well as educators. Employers, trade unions, professional organizations and other voluntary bodies of a great variety all have a part to play in the development of people, which is the task of education. So too we wanted our Conference to involve the wider public as far as possible and to seek to extend public information and understanding of the issues with which we were concerned. Although our canvas was broad it was inevitable that discussions would be considerably influenced by the current high level of youth unemployment and concentrate somewhat on the relationship of schooling to this problem.

One strong impression that I gained was how little we know or have brought together on the issue of unemployment. There are clearly many unknowns and uncertainties both social and economic. It also seems to me that there are great dangers of both over-simplification and over-dramatization with respect to the causes and solutions. We must recognize that there are no simple problems in this field and no simple answers.

What then are some of the areas in which we are not adequately informed? What is the impact of technological and social change on jobs, not only as it might apply in any industrialized nation but particularly in Australia? How far does the increased efficiency generated by this change create new jobs? What will be the effect of demographic changes with an increasingly ageing population? Will this lead us in a few years to change our views again on extended education and early retirement, for instance? What are the trends in our public and personal expectations? What foreseeable factors are likely to influence these? What are the real limits to satisfaction of these expectations as they now stand? What goes with what in economic terms? Many of our earlier ideas of economic inter-relationship have been overturned by recent experiences. Moreover there seems to be little relationship between our researchers in different fields such as economics, sociology and

psychology, to enable them to bring together their varying insights and understandings on these complex issues.

When we turn to unemployment itself, what is its real extent? How much hidden unemployment is there or indeed how much hidden employment? How great is the unofficial and unrecorded labour market? In the matter of education and work how does the nature and content of education effect the world of work? Professor Jochimsen quoted evidence on studies in Germany and France which suggested that the work structure in the community can be considerably influenced by the directions taken by education. How far can and do people change the nature of their jobs by the manner in which they undertake them? How far does education as compared with other factors in the community, change work expectations? Many people have confident answers on many of these questions but little hard evidence. There is a great need to extend and to bring together our knowledge on these issues and many others relevant to the problem.

One thing is certain, work remains a significant aspect of our life in meeting both societal and personal needs. It is still a major source of income distribution and personal significance, as well being the means for the production of the goods and services which the community requires. In the immediate past these different aspects seem to have worked together in the same direction. Today they seem no longer to be in such agreement.

Apart from the need for more evidence and better co-ordination of what we already know about unemployment and about the relationships between education and the world of work, let me sum up ten points which seem to me to have emerged from the Conference.

1. We can expect a continuing decline in work demands in general. This has been going on ever since the industrial revolution and will not stop now. What we have to decide is how the available work is distributed.
2. Youth unemployment will continue as a significant problem for some time ahead. The social and economic changes which would resolve this will not be easily won. However, unless it is tackled very seriously it will become a highly explosive issue.
3. There is a real challenge to the schools to concern themselves not only with literacy, numeracy and attitudes to work but also with increasing understanding of our society including the problems that cause unemployment, the problems of living with it, and the capacity of people to contribute constructively in conditions of increasing industrial democracy.
4. Schools will continue to have great difficulty in deciding on their role and contribution in the face of widely diverse views in the community. For education to contribute in every way significantly to the solution of the problem of unemployment may well depend on a greater degree of consensus on the role of education, as is evidenced for instance in West Germany where the significance and importance of education and training is much more commonly accepted. We must beware, however, of imagining that we can readily transport specific solutions between differing cultures.

5. There is a great need for increasing communication and understanding between employers, educationists and society at large. In this, among other things, we should be seeking to develop a better signalling system on the issues of education and employment. This should include manpower planning but in the sense of clarifying and inter-relating education and training provisions and manpower needs, including versatility as well as specific skills and knowledge, rather than in attempting precise numerical predictions.
6. We need to develop a series of alternatives for the development of our young people, recognizing that they can learn, and often may learn better, in circumstances other than those provided by schools. It should be possible to develop alternative mixes of education, employment and community service to meet varying needs.
7. We should be seeking a co-ordination of effort within the framework of an overall youth policy, rather than adopting diffused ad hoc remedies as we seem to be doing at present.
8. Justice and equity demand that there should be opportunities for all, not only within any given generation but also as between the various generations. This means seeing that in providing opportunities for the young we do not dispossess older generations, members of which the young will progressively become. This emphasizes the need for the further development of continuing education which may well become much more important for the relatively 'dispossessed' younger generation of the present than it is for the generations which enjoyed the opportunities of the 1960s and early 1970s. We should also note the developing overseas practices of providing more paid educational leave and more 'life planning' services available to people of all ages.

SOME SELECTED PAPERS

TRANSITION FROM SCHOOL TO WORK

C. BLAKERS

A great deal of time and anguish have been expended in the last few years in a debate about whether or not schooling should prepare students for work. I believe that such debate, though it may offer outlet for the airing of opinions, prejudices and frustrations, is largely a waste of time since it ignores the fact that education, willy-nilly and well or badly, always has had a role in preparing students for work.

Work and education are integral and mutually reinforcing components of any society from the primitive to the highly complex. The work and endeavour of its people are what enables a society to live and grow and to achieve many of its goals. To the individual, it offers sustenance, occupation and identity. Depending on the society and its circumstances, work can further provide for the individual opportunity for independence, personal development and satisfaction.

Education, whether provided informally or in specialized institutions such as schools, is also part of the fabric of the society since it is the means by which the knowledge and skills considered essential to the culture and identity of the society are passed from one generation to the next. In the process, it shapes the thinking and behaviour of the individual and becomes a breeding ground of ideas which contribute to development and change in the society.

What education and work can offer to the individual for his personal development depends very much on the character of the society of which they are a part. The greater the weight accorded by a society to the rights and needs of individuals — in practice as well as theoretically — the more the individual stands to gain in personal development and satisfaction from both education and work. The democratic society is one which attempts to find a just balance between the rights and needs of its individual citizens and those of the society as a whole.

As T. H. Huxley commented a century ago:

> . . . the great problem of that social chemistry we call politics, is to discover what desires of mankind may be gratified, and what must be suppressed, if the highly complex compound, society, is to avoid decomposition . . .
>
> If individuality has no play, society does not advance; if individuality breaks out of all bounds, society perishes.[1]

Neither work nor education can be considered in isolation from each other and from the character and aims of the society itself. Both, in their development, provisions and distribution, will reflect the kind of society of which they are a part. Both will, in turn, exert an influence on the nature and development of the society. In a democracy, the three are linked in the personal growth and development of the individual.

If we look back at the way in which our education provisions have been shaped, we can see the underlying relation between education, work and the character of the society clearly illustrated.

In earlier centuries, education for work was the accepted norm. Monasteries prepared students for the clerical life; master craftsmen and tradesmen educated apprentices to carry on their work; and a liberal and classical education was provided privately or in schools for those whose business was monarchy, government and ruling. The education provisions catered for a relatively stable society where each individual had a recognized place and occupation.

The concept of a literary-type education for the masses which appeared in the nineteenth century had its main origins in the need to provide a work-force with the level of skills and education necessary to meet the rapidly changing conditions and demands of industry and trade; but it was also influenced by the spread of ideas which placed emphasis on the rights of the individual in a democracy. Schooling came to serve two main purposes: to provide the education and skills needed by the society for its work, and to offer a means of personal development and upward social mobility to individuals.

By the end of the Second World War, educational qualification was well established as the key to a good job, money, status and presumably happiness. A more socially mobile and ambitious population demanded that schooling and universities provide the avenue to educational qualification — not just for the few as previously, but for all. At the same time as the Murray Committee[2] asserted in 1957, the national interest demanded a continuing supply of graduates and highly qualified people. So began the rapid expansion of tertiary education and of schooling which matched the social and industrial expansion of the post-war decades.

In all this time, there was little heard about transition from school to work. Students left school or tertiary education and got jobs. Many of them undoubtedly experienced personal problems in the transition, as the incidence of job-changing among young people in the 1960s indicated; but these problems were not then seen as a social problem. They were of concern to the students themselves and their families, to a few teachers and to some others who recognized that expanded educational opportunity was not in fact achieving the social reforms envisaged earlier by people like Sir Richard Livingston, who commented in 1943:

> As soon as you begin to educate people, you teach them, however feebly, to use their reason . . . And as soon as people begin to think, they will among other questions ask themselves: 'Why should there be such inequalities in life; . . .'.
>
> As soon as this simple question is asked by a sufficient number of people, social change begins; it is the lever which has set change in motion today.[3]

Instead, it has been shown that the schools, while ostensibly based on equality of opportunity, in fact reflect and entrench the competitiveness, the discrimination and the deep inequalities of the social structure; that, oriented as they are towards academic and tertiary study and conditioned by public examinations, they have catered for only a small minority of their students, and these from the better-off and better educated families. It was to meet

119

the needs of students for whom schools were not catering adequately that work experience and career education programmes originally developed in the late 1960s.

Why then are we suddenly so concerned about the transition from school to work and the relationships between school and work? Transition from school to work as a social problem has drawn public recognition only in the last five years or so — coinciding with the rapid growth in unemployment, particularly of school leavers and other young people. During the same period, criticisms of schooling have mounted: schools are failing to teach literacy, numeracy and the work ethic, standards in education are too low or lacking altogether; schools are encouraging permissiveness, mediocrity and unreal expectations; even — if schools did their job better there wouldn't be an unemployment problem. On the other hand, there are still those who maintain that the schools should be free of the taint of the work-place.

Behind the arguments about the purposes of schooling lie other less explicit divisions about the aims and directions of Australian society itself. What we are seeing now is a clash of differing social aims and values always inherent in our society, but now made sharper and more explicit under the stress of present economic circumstances.

Australia has always seen itself as a democratic society in which the rights of the individual in the society to opportunity for personal development are widely acknowledged, even if the practice falls far short of the declarations. But in times of rapid change such as the present; in times of economic insecurity, of high unemployment and the personal fears and competitiveness which these engender, the practical implications of being a democratic society tend to become obscured or ignored. Having lost confidence and direction, people look for scapegoats, for quick solutions to insoluble problems for a way back to the golden years of some indefinite past. Schools and education are a natural target because they are integral to the society and the society feels itself entitled to make demands on them. The schools, for their part, respond — protesting — with *ad hoc* measures which are often no more than gestures. The very fact that we are here tonight talking about school and work is a response to community expectations of, and attacks on, schooling.

But if we confine our talking to transition from school to work, to literacy and numeracy, to career education and work experience, to open schooling versus the traditional approaches, we are skittering around on the surface of a problem which in fact involves the future of the society itself; and which really demands of both schools and society an honest re-assessment of values, aims and directions, and a commitment to accepting the implications of these within a context of social change.

To identify schooling as the source of, and the solution to, social problems is to underestimate the influence of society on schooling and to overestimate the capacity of schooling to change society. To concentrate the argument exclusively on what schools should do is to turn our faces away from the wider problems. It is like arguing about who should cook the dinner when the house is burning down.

149

We have in fact reached what could be a critical turning point in the development of our society — one where we need to take our bearings and look for new directions. We are beyond the point where we can continue to hope that current economic and industrial developments are an aberration and that, provided we keep doggedly on the well-trodden paths, things will return to 'normal'. 'Normality' in this sense is a post-war phenomenon of less than 30 years' duration. The social issues of the immediate future have already been illustrated in England by the indefinite suspension of the 200-year-old London *Times;* in Australia by the Telecom and other disputes which centre on the place of technology in the industry. The silicon chip is likely to revolutionize not only industry but the life of the society itself — just as machines revolutionized life in the nineteenth century. There is no going backwards, however attractive the past might seem in nostalgic retrospect.

Let me quote from a recent address by Mr A. G. Moyes, Chairman and Managing Director of IBM Australia Limited:

> Although I will reference computers and communications technologies specifically today they are only part of the total technology growth. Their uniqueness lies today in the breadth of their impact and in the speed of their development.
>
> Technological developments will affect our leisure time, our health care and many other aspects of our life style. We have seen the world in which we live transformed, but an even more spectacular transformation lies ahead of us. We are on the threshold of a new industrial revolution.[4]

We have to expect for our children a society very different from the kind of society which we and our parents and grandparents have known. It is a society in which paid employment of the kind we have taken for granted becomes a scarcity; in which machines will provide greater leisure for more human beings. The question which faces us is

> —whether we, as a society, are content to concentrate the leisure in some sections of the population in the form of unemployment;
>
> —or whether we try to make use of the leisure for the benefit of all individuals and of the society as a whole.

To accept large-scale unemployment as a continuing feature of our society is to accept a society as rigidly class structured as any in history — though in a topsy-turvy kind of way, because the leisured class will be those at the bottom of the social ladder rather than at the top as in all of previous history. The important measure of social status will then be the possession of a job. This is an odd situation to say the least. Throughout man's history, societies have sought just the kind of leisure which is being offered to us in the future by technology. In most previous societies, including those we admire like the democracy of Athens and the imaginary Utopia of Sir Thomas More, leisure was for the privileged section of the society and it was gained on the basis of slave or serf or peasant labour. Now technology is within striking distance of providing the same kinds of opportunities for a leisured, cultured and humane society without the exploitation of some human beings by others.

And 'leisure' should not be seen as simply 'doing nothing' or filling in time with pleasure or selfish pursuits. Much of the progress and development in our civilization and much of the 'quality' of living have depended on the productive use of leisure in one way or another. In our society for the foreseeable future there will be no shortage of work to be done, but much of it will be work of a kind which has hitherto been regarded as non-productive in the material sense and therefore non-essential.

To a society which has developed and prospered on expanding material production, work such as that associated with caring for others, or preserving the environment, or ensuring justice and opportunity for all, or meeting the spiritual, cultural and social needs of people has been regarded as a luxury to be afforded or jettisoned as economic circumstances have appeared to indicate. To break the ties of past thinking and practice and to make the most of the powers technology is likely to offer us involves a fundamental re-thinking of what we mean by work and leisure and of the aims, patterns and practices of the society and its education.

We as members of the total society — students, parents, educators, employers, employees or whatever we are — have a fundamental question to answer. Is the Australian social aim, as the Prime Minister has asserted, 'for an Australia in which everyone has a realistic opportunity to seek personal fulfilment' — or for an Australia in which not everyone but only some people have this opportunity?

If we re-affirm a commitment to the democratic principle that all individuals are of equal worth and have equal rights, are we prepared to face the social, industrial and educational implications now and in the future?

These may involve:

—the redistribution of resources within our society so that the benefits of technology are directed to the society as a whole rather than to particular individuals or groups within the society;

—a re-thinking of concepts of progress, productivity, work and leisure;

—continuing education for the needs of the workforce and for individuals in their use of leisure;

—the removal of barriers to flexibility and adjustment imposed by the rigidity of many of our institutions, our processes and our attitudes.

That there is a process of re-thinking and adaptation already under way in our society has become apparent in changing social attitudes, concepts of work and patterns of living, especially though not exclusively among young people. It is important that these processes of change should be consistent with individual and social aims and values, rather than — as many of them are — *ad hoc* reactions by individuals faced with circumstances and pressures which overwhelm and reduce them to helpless anonymity.

If the society genuinely values the rights of all individuals, then the society as a whole, through its education, welfare and other provisions, has responsibility for providing each individual with the opportunities he needs

for self-development and the skills and techniques he needs to make the most of his opportunities and of the leisure offered by technology. Adequate, appropriate and continuing education has to be recognized as a right of each individual. It is not a commodity to be bought according to means, nor a privilege to be bestowed or withdrawn selectively.

It becomes the role of schooling — as the first stage in the continuing process of education — to assist each of its students towards the personal confidence, competence and independence of mind which will allow him or her to see change as a challenge rather than a fear. To achieve this requires a variety of schooling to meet individual need and a relationship between schools and society which recognizes that students are at the same time members of the community.

The underlying relationships between school, work and society have not so far in Australian education been closely reflected in the decision-making structures and administrative procedures of schooling. Schooling has developed in a way which isolates it as an institution from the life of the society and even of the local community in which it operates. It has been seen as a separate process by which infants are fed in at one end and fully shaped adults emerge at the other. In the process, the students are isolated for a major proportion of their waking time from the personal interests they pursue out of school time, from their family concerns and culture, from the issues and processes of the wider community. The pressures for educational qualification have kept more of them at school, and therefore dependent socially and economically, for much longer than in any other society in history, and in so doing have deprived them of responsibility for themselves and others. The separation of the young through schooling from adult life and concerns constitutes the real problem of transition.

Schooling must take account of the fact that what the child learns in school is one part only of what he is learning during his early years as a member of a family and of the community, and that he will go on learning throughout his life. Its structures and practices should be consistent with the maintenance of close relationships between the school and family and the wider community. To achieve this, the patterns of schooling and teacher attitudes must change radically and so must parent and community attitudes to school. Schooling must become a co-operative endeavour involving students, teachers, parents and the community in a personal way. The community, for its part, must learn to accept personal involvement in and responsibility for schooling. There is no excuse for groups such as parents, employers and unions to criticize schooling and at the same time to take no part in contributing to its processes.

I have been arguing that what are regarded as problems of schooling and of transition from school to work are basically problems of a changing and confused society. But these have been exacerbated by structures of schooling and community attitudes to schooling which do not reflect the real relationships which exist between education, work and society. The fact that we talk of transition implies a concept of two separated states of being which need to be bridged, rather than of closely related stages in the developing maturity of individuals.

Change along these lines is already noticeable, particularly during the last five years. There has been considerable erosion of centralized decision-making in schooling; parents and teachers are learning how to talk to each other and even how to work together; work experience programmes have brought employers and union representatives into closer and more personal contact with schooling. These are the beginnings of change in the role and relationships of schooling which raise some difficult but exciting questions for the future, beginning immediately with the question of what we want our schools to do for our children. In other words, what responsibility for the development of the child belongs with schools and what with the family, with employees, unions, churches, clubs and other social institutions?

Looking ahead to more flexible relationships between school, work and society, we will need to consider:

—whether full-time schooling should be compulsory, and, if so, to what age;

—the possibilities of part-time work-schooling;

—how to provide financially for continuing education rather than simply the initial dose to last a life-time.

In furthering closer relationships between school, work and society, career education and work experience as a part of career education have an important and continuing role. The effectiveness of the role will be diminished if career education accepts without question the common rhetoric about schools preparing students for work; if it fails to examine without prejudice what is happening in the society, what is likely to happen and what is desirable should happen; if it simply settles in to school routines as just another subject competing for precious academic time; if it ignores the role of the family and the community in the education of the child.

Career education is or ought to be by its nature outward-looking and forward-thinking. It has the capacity to stimulate, ease and guide the processes of change within the school and to influence students' concepts of work and of their role in a changing society. At the very least it can do something to reassure young people that the unemployment which they and the society are suffering is not their fault; that the society's apparent rejection of them is a condemnation — not of young people — but of the society's own priorities and values. Further, it can help them to understand themselves and others; to come to terms with their own needs, capacities and relationships as human beings in a natural and social environment; to develop the sense of identity and the independence of mind which allow a person to survive and grow in adverse circumstances; to learn the skills of changing the circumstances.

This is asking a lot of career education and only those who are actually attempting to put it into practice will appreciate the difficulties. But it seems to me that career education and associated work experience programmes (provided these are interpreted in a liberal fashion) are the point in school life at which school, work and society naturally meet. As such, it offers a starting-point towards the concept of schooling as a co-operative endeavour involving students, teachers, parents and the community in a personal way.

It is only by pooling our mental, physical and spiritual resources that we are likely to provide the kind of schooling which is capable of fitting children for the century ahead.

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THOSE BETWEEN SCHOOL AND WORK

J. C. HENDERSON

A recent feature in West Australian State high schools has been the introduction of alternative programmes of general education for students in Year 11. The programmes are an alternative in that they specifically cater for a student population who were either not served, or poorly served, by the tertiary entrance focus of traditional programmes in Years 11 and 12.

The concept has gained wide and rapid endorsement among schools. The number of schools offering an alternative programme has expanded from an initial 2 in 1975, to 23 in 1977, and to 40 in 1979. In the same period the number of students has increased from less than fifty to a little over 1,000. This represents approximately 12% of all students enrolled in Year 11 in State Schools.

The reasons for the appearance and rapid growth of this body of students are both numerous and complex. However, in general terms they might be characterized as that group of students who are beyond the age of compulsory schooling, have no real academic ambitions, and who, for a variety of reasons, have not yet entered the work force. They are, in effect, caught in a transition, somewhere between the traditional notion of 'the upper school' and the world of work.

On present trends we can expect the general pool of students from which these students are drawn to continue to grow. Data indicates (tables 1 and 2) that the proportionate retention of students into upper school increased rapidly in the 1960s and 1970s without a similarly proportioned increment in tertiary enrolments. This discrepancy is not solely a function of a limited availability of places in tertiary institutions. Students continue schooling for many other reasons, as well as aspiring to tertiary entrance. Some have career intentions where 12 years of schooling have become an established pre-requisite, generally expressed in terms of TAE results. Others are simply looking to education to improve their life chances, or, in an age when there has been a marked trend towards credentialism and more schooling, simply to maintain their place in the queue for jobs (Karmel, 1977, p. 4). An increasing number appear to be motivated by little other than the superiority of the social life offered by the school when compared with the realities of employment, or life on the dole (Morgan, 1977, p. 130). Finally, there are students who set out with honest, if misguided, intentions of tertiary entrance only to withdraw when they find the rigorous academic standards too demanding.

TABLE 1

School Participation Rates: School students age 16 years as a proportion of the same age and sex, Australia, 1960 to 1975

	1960	*1970*	*1971*	*1972*	*1973*	*1974*	*1975*
MALE	31.9	55.5	57.7	57.8	56.6	55.3	57.0
FEMALE	24.7	47.6	49.5	50.9	52.2	52.2	55.2
TOTAL	28.4	51.6	53.7	54.5	54.4	53.8	56.1

TABLE 2

Tertiary Education Participation Rates: University Undergraduates and College of Advanced Education Students as a ratio of the population aged 17 to 22 years, Australia, 1960 to 1976.

	1960	*1970*	*1971*	*1972*	*1973*	*1974*	*1975*	*1976*
UNI	6.0	7.9	8.5	8.6	8.8	9.2	9.4	9.5
CAE	n.a.	4.6	5.4	5.9	7.1	8.0	9.0	9.5
TOTAL	n.a.	12.5	13.9	14.5	15.9	17.2	18.4	19.0

SOURCE: "The School-Work Interface" P. KARMEL, 1977, p. 4.

Whatever the reasons for returning to upper school, a large and increasing proportion of students do not remain beyond year 11. It is these students, those who commence but do not remain beyond year 11, who constitute the pool from which alternative programme students are drawn. The growth in its size is shown in Table 3. Relating only to Western Australia, it indicates that of each cohort of students commencing secondary education in year 8, more than 50% now continue into year 11 and that there is a steady upward trend in this ratio. However, as columns 4 to 7 of Table 3 indicate, although increasing proportions of each body of students have continued into both year 11 and year 12 over this period, nevertheless there is a declining proportion of those who commence year 11 and continue into year 12.

TABLE 3

Year 12, Year 11 enrolments as a proportion of initial student intake, Year 8; Year 12 enrolments as a proportion of initial Year 11 intake, Western Australia, all Secondary Schools, 1966 to 1973

Date of Entry to H.S.	*Student Nos Yr 8*	*Student Nos Yr 11*	*Yr 11/ Yr 8*	*Student Nos Yr 12*	*Yr 12/ Yr 8*	*Yr 12/ Yr 11*
1966	17412	6032	.3464	4690	.2693	.7775
1967	17637	6256	.3577	4866	.2741	.7778
1968	19059	7249	.3803	5648	.2963	.7791
1969	19871	8232	.4143	6121	.3080	.7436
1970	20064	9403	.4687	6581	.3280	.6999
1971	20145	9661	.4796	6875	.3412	.7116
1972	20642	10795	.5230	7375	.3572	.6832
1973	21202	11136	.5252	7416	.3497	.6659
1974	22028	11578	.5256	7543	.3424	.6514
1975	22414	12125	.5409	n.a.	n.a.	n.a.

SOURCE: Western Australian Yearbook, Vols. 7-11; W.A. Education Department "Education Circular", Vols. LXXII — LXXXI

It is evident that while there is a strong drive for continued schooling beyond the age of compulsion, there is an increasing proportion of these students for whom the desire for continued schooling terminates as some time in year 11.

This trend is even more pronounced if only the enrolments of State secondary schools are considered. Table 4 does this, providing a breakdown of retention rates between State and non-State schools, males and females. The table clearly shows that while the declining proportion of year 11 students continuing into year 12 is partly attributable to all four components of table 4, nevertheless the most important factor by far in the decline has been males in State secondary schools. Retention between years 11 and 12 for this group has declined from a stable ratio of just over 0.8, 1969-1971, to 0.62 1967-1977. Taking males alone, and equating those who terminate their schooling at some point during year 11 with the pool of potential students for alternative programmes, the pool has grown in size

TABLE 4

Student Retention Rate, Year 12 as a proportion of initial Year 11 enrolment, State and non-State Schools, Male and Female, Western Australia, 1969 to 1975

Initial Yr 11 Enrolment	*Sex*	*Year 11*		*Year 12*		*State Yr 12/ Yr 11*	*Non-State Yr 12/ Yr 11*
		State	*Non-State*	*State*	*Non-State*		
1969	M	2092	1100	1687	965	.8064	.8772
	F	1975	1045	1198	840	.6674	.8038
1970	M	2145	1087	1750	942	.8158	.8666
	F	1942	1082	1308	866	.6735	.8003
1971	M	2571	1176	2079	1036	.8086	.8809
	F	2301	1201	1538	995	.6684	.8284
1972	M	2975	1231	2239	1042	.7526	.8464
	F	2767	1259	1796	1044	.6490	.8292
1973	M	3347	1399	2323	1183	.6940	.8456
	F	3271	1386	1953	1122	.5970	.8095
1974	M	3388	1379	2324	1126	.6859	.8165
	F	3426	1468	2215	1208	.6465	.8228
1975	M	3896	1452	2556	1194	.6560	.8223
	F	3870	1577	2372	1253	.6129	.7945
1976	M	3910	1438	2401	1203	.6140	.8365
	F	4079	1709	2499	1313	.6126	.7682
1977	M	3965	1436	2464	1150	.6214	.8008
	F	4444	1733	2553	1376	.5744	.7939

SOURCE: Western Australian Yearbook, Vols. 7-11, and W.A. Education Department "Education Circular" Vols. LXXII — LXXXI

from 405 students, 1969 intake, to 1499 students, 1977 intake. Such an equation is not strictly accurate. Some of these students are 'genuine' dropouts from academic programmes, and others undoubtedly benefit from a continuing (beyond year 10) rigorous programme, of academic studies even though they do not complete that programme. Both of these factors would serve to make the potential pool of alternative programme students less than has been indicated. On the other hand, no account has been taken of the female students who terminate their schooling during year 11. In 1977 these totalled 1891 students, however a large number of these were enrolled in vocational courses in commercial studies. Nevertheless, a significant number of females could also be regarded as potential students for the alternative programme, although in fact, at present there are very few

female students enrolled in the programme. (1979: less than 5% of all students enrolled in the programme).

Characteristics of Students Enrolled in Alternative Programmes

The most obvious characteristic of students enrolled in these programmes is that they are different to the traditional image of upper school students in that they have no real scholastic ambitions. However, at the same time they have made a conscious decision to remain at school.

A survey in late 1977 gathered data on the general academic achievement of a sample of these students, based on the final levels and grades gained in the four core subjects of the Achievement Certificate in year 10. This is summarized in Table 5, and shows that across these subjects approximately 30% of the students were in the second quartile of achievement, 40% in the third quartile, and 30% in the fourth quartile. If achievement is used as a proxy for ability, and assuming similar degrees of application, motivation, interest, and persistence in years 11 and 12 as in years 8 — 10, then at least the top 30% of all alternative programme students would have been only marginal prospects in the TAFE programme. The remainder would have had very little chance of competing successfully in an academic programme of that difficulty. However, viewed from the other perspective, the data indicates that the students are not simply academic incompetents, incapable of pursuing a meaningful programme of general education. The latter opinion was expressed frequently by teachers in schools offering alternative programmes, although only once by a teacher directly involved.

The same sample of students were interviewed and asked to list the important reasons why they had returned to school and enrolled in the alternative programme. Many gave a single reason, others gave as many as four. The responses were listed, content analysed and placed into categories. Results are shown in Table 6. Three important influences are apparent.

The Effects of Juvenile Unemployment: This was listed as a direct reason for the return to school by 38.7% of all student sampled. A further 29.4% indicated an awareness of the need to upgrade their employment prospects. Of these 10% had also listed the first reason, making a total of 58% of all students for whom a prime reason in returning to school was either unemployment or the need to make themselves more competitive in the labour market.

TABLE 5

Final Level and Grade, Core Subjects, Year 10, Achievement Certificate, students enrolled in alternative programme, 1977

N = 129

	Number of Students				*Total*
	Maths	*English*	*Social Studies*	*Science*	*%*
FIRST QUARTILE	1	2	6	4	2.86
SECOND QUARTILE	24	32	33	35	27.31
THIRD QUARTILE	58	44	40	44	40.97
FOURTH QUARTILE	27	40	35	29	28.85
TOTAL	110	118	114	112	

FIRST QUARTILE = All Adv. Levels: SECOND QUARTILE = All Ordinary plus Intermediate Credit: THIRD QUARTILE = All Elementary plus Intermediate Pass: FOURTH QUARTILE = All Basic.

Maturity: Nearly half of all students listed reasons associated with maturing. It was specifically listed by 25%. Of the 41% who wanted "to do something useful" 11% gave no other reason and it is reasonable to assume that their principal aim was also maturity, although it was not expressed as such. A further 3.8% were undecided on their future. Together, but excluding students who jointly listed the reasons of doing something useful and improving employment prospects, 42.6% of all students were concerned with maturity in one sense or another.

Parental Pressure: This accounted for a relatively small proportion of the students, 12.4% of whom only two students (1.5%) listed it as the sole reason. Most frequently it was linked with reasons given under "unemployment".

The role that counselling, or guidance, had played in these decisions was difficult to ascertain. It was evident that most students had received some counselling, whether from guidance or teaching staff, but no more than a dozen students indicated that it had positively influenced their decision. Surprisingly, those who admitted its influence were generally bitter and claimed that they had been directed into a programme unsuited to their needs or capabilities.

TABLE 6

Numbers and percentage of students, categories of responses, enrolment in alternative programme, sample of eight schools, 1977.
N = 129.

	Number	*%*
1. *Reasons associated with unemployment*		
a. Unable to find employment	50	38.7
b. Improve employment prospects	38	29.4
c. Upgrade core subject levels/marks	31	24.0
Total of students listing one or more of the above reasons	89	69.0
2. *Reasons associated with maturity*		
a. A year in which to mature	33	25.5
b. Do something useful	53	41.0
c. Undecided on own future direction	5	3.8
Total of students listing one or more of the above reasons, but excluding those linking 1b with 2b	55	42.6
3. *Reasons associated with parental pressure*	16	12.4
4. *Reasons associated with miscellaneous factors*		
a. Reduce apprenticeship time	2	1.5
b. Preliminary to TAE programme	2	1.5
c. Too young for entry to nominated career	8	6.2
d. Nature of the courses offered	3	2.3
e. Originally in TAE programme	9	6.9

Finally, subjective impressions of the students self concept were collated, both from the students perceptions of themselves and from teachers observations of the students. Although most students gave a strong impression

of motivation and dedication to improving their prospects, there was also a distinct air of despondancy about their capability to constructively do so. Many students expressed a strong feeling that the alternative programme students were a second rate group, looked down on by staff and fellow students alike.

These perceptions were shared by most of the staff involved in the programme. Students were frequently described as "demoralized by their poor academic history" and "suffering badly in self-esteem". Briefly summarized, important characteristics of this student body appear to be:

a. Well motivated and keen to succeed.

b. The majority are drawn from the Intermediate, or corresponding, levels of the Achievement Certificate, however there is a wide variation in range between schools.

c. A low self concept and demoralized by past failure.

d. Strongly influenced by employment and maturity factors, and to a lesser extent parental pressure, in their return to school.

The fact that these are different students to the traditional 'upper school' student is now well recognized. The W.A. Education Department has legitimized the differentiation through its acceptance of the concept of a school based curriculum directed to particular requirements of each schools own group of students. It has further sought to facilitate the establishment of these programmes through a Departmental committee, the Alternative Programmes Steering Committee, and the appointment of a full time executive officer of the committee. Schools have recognized the different character and requirements of the students, as evidenced by the widespread and rapid implementation of alternative programmes.

Present Alternative Programmes

The possibilities for these programmes are quite exciting. The schools are remarkably free of external constraints in offering the programme and assume responsibility for divising their own curriculum. A genuine opportunity exists to develop a programme which meets the needs of the school's own students and which offers them the opportunity to develop as individuals and contribute to society.

Unfortunately few of the programmes appear to be approaching what is possible. When this study was initiated, in late 1977, the programme was implemented as it might be in only a small minority of the schools. Aims and goals were clearly understood and logically analysed to derive content and strategies consistent with pursuing the stated aims. However, in the majority of schools the aims and goals were either so ill defined or so generalized that they failed to serve as a guide to action. The academic core of many programmes was an un-imaginative, content reduced version the courses offered in the TAE programme.

Instructional strategies were similarly deficient. Most appeared to be based on intuition and the 'pooled ignorance' of staff involved in the programme. Although teachers were genuine and enthusiastic, with few excep-

tions they lacked either experience or expertise in divising their own curriculum. Many expressed dis-illusionment and a lack of faith in their own efforts. Most expressed a strong desire for some guidance, and for some assurance that they were heading in the right direction and in the right manner.

In the intervening eighteen months little appears to have changed. Although there is now a regular, functioning Alternative Programmes Steering Committee, with a full time executive officer, at the school level its impact has been mainly confined to facilitating access to resources and organizing in-service meetings which have served as a forum for the exchange of ideas. The committee has not issued curriculum guidance, and the programme remains school based, with each school retaining responsibility for its own curriculum.

The result has been a considerable apparent diversity in the programme organization and structure which serves to mask a depressing degree of 'sameness' in most schools. Data collected from 30 schools in 1979 revealed wide variation between schools in the degree to which the programme had its own staff, own timetable, own buildings and resources, and a student body who accepted the programme as a package. In effect, there was wide variation in the degree to which the programme was integrated with the remainder of the upper school.

Beneath the structural diversity exists a dull uniformity of content which appears to be largely without purpose. Most schools provide an academic core of subjects which are recognizable as English, Social Studies and Maths with Science much less frequently encountered. Workshop and trades courses are part of every programme, although they are accorded different priorities. In a number of schools they are so much emphasized that the programmes would be better described as 'vocational' rather than general education. General interest courses, such as consumer education, and special interest courses, frequently in the form of a very limited range of options occupy the remainder of the week.

In the sample of schools offering the programme which were visited, a striving for 'openness' was apparent, both from classroom characteristics and teachers comments. There was generally a flexible arrangement and use of space, simultaneous use of the environment, diversified student grouping patterns, and more open verbal interaction patterns. All of these have been identified as major elements of the open classroom. (Cochran and Tuckman, 1976, p. 66; Barth, 1972, pp. 74-5; Hogben, 1974, p. 229). During interviews most of the classroom teachers associated with the alternative programme stressed the importance they attached to their percepion of the open classroom although their perceptions were generally ill-defined. Many teachers gave the distinct impression that their attempts to promote openess was the central element of the alternative programme.

The Future of the Alternative Programme

As previous paragraphs have shown, many of the existing programmes are in difficulties. Observation and interviews have indicated that the fault does not stem from a lack of enthusiasm or diligence of those involved. Rather it is the almost total lack of practical curriculum guidance that appears to be the cause.

Curriculum works specifically directed towards students of this nature are rare. In the United States, which serves as a source of model for much of the curriculum theory and design in this country, these students appear to be either integrated into the overall general education stream, or to be tracked into vocational programmes. The literature therefore tends to concentrate on these two programme types, or the broader scene of total curriculum, with the result that little practical guidance can be gained from this source.

The United Kingdom is a more fruitful source. *Half Our Future*, the so called "Newsom Report" (Newsom, 1963), on which the decision to raise the school leaving age was based, recommended a wide range of curriculum policies and practices suited to less able students who would be forced to remain at school when the leaving age was raised. It is reinforced by a number of Schools Council sponsored studies which have researched several context variables. In particular the study by Morton-Williams and Finch (1968) provided data on student attitudes to content and teaching methods which is of practical importance in developing instructional materials and strategies. Their study also surveyed students, teachers, and parents perceptions of the importance of a number of potential curriculum objectives at this level. Cave (1968) has also directed his attention to the same group of students. His curriculum places heavy emphasis on the teaching process, social interactions, personal development, and the improvement of communications at every level.

The particular needs of these students are further met by a range of curriculum packages tailored to their requirements. The most radical and influential of these is the Humanities Curriculum Project which, through its distinctively different approach to content organization, use of aims and objectives and pedagogies, has made a considerable impact on curriculum theory and practice (MacDonald and Walker, 1976, p. 80).

Taken together, these U.K. products comprise a significant contribution to the development of a curriculum suited to the alternative programme type student. However, at the same time there are serious limitations at the practical level, in that the works are either theoretical, or have a 'culture gap'. Theory is not without its place, but the group of teachers involved in the alternative programmes are, by their own description and with very few exceptions, practical people. They thrive in a 'hands on' situation. Theory, particularly when it requires the synthesis of a number of disparate sources is largely wasted.

On the other hand, the curriculum works with a more practical orientation inevitably suffer from the cultural differences between the environment for which they were assigned and the West Australian context.

Unfortunately there are no curriculum works for this group of students from Australian sources, from which the cultural gap might be expected to be smaller or non existent. Writers such as Sheehan (1973) and Karmel (1977) have observed and commented on the trend towards an increasing upper school population, without considering the impact on curriculum. Fitzgerald (1970) analysed the situation of these students in general curriculum

terms, and concluded pessimistically that ". . . the task of defining a total programme of learing experiences which balances the development of the individual student with the needs of society is beyond the competence and resources on hand in the secondary school". (Fitzgerald, 1970, p. 123). He suggested that the secondary school had become simply a place for holding adolescents until the labour market was ready to absorb them. (1970, p. 123). A more recent study, based on research among 1600 students, 15-18 years age group, Melbourne, has urged a re-appraisal of the curriculum in terms of student needs, closer links between school and workforce, and student personal development (Poole and Simkin, 1976 pp. 25-28). Morgan (1977) has also examined the problems of school to work transition for students, however, as with the previous papers cited, he makes no effort to delineate the curriculum implications. The work which comes closest to fulfilling the need is the first Dettman Report (1969), a study and report on West Australian secondary education. It made many far reaching recommendations for the reform of upper secondary education, many of which are relevant to the students who are the focus of this paper. However, the Report's context was much broader than this single group of students and its over all relevance is therefore limited.

The results are as stated at the beginning of this section — an almost total lack of practical curriculum guidance leading to many of the existing programmes being in difficulties. The great majority of teachers involved in the programme know neither where they are going nor how they will get there. In the interests of school based curriculum the W.A. Education Department appears to have deliberately refrained from issuing guidance, in order that it should not be construed as direction. At the same time, the number of teachers involved in the programme who have the necessary skills to devise their own curriculum goals and aims, and to systematically develop objectives, strategies, and content from these, is pitifully small.

An 'Alternative' Alternative

There are about a thousand students enrolled in the alternative programmes in 1979. They have made a conscious decision, for whatever reasons, to invest their time for some expected benefit. Although their expectations are possibly at a sub-conscious level and rarely articulated nevertheless they are entitled to a programme of studies carefully formulated to meet their needs.

Research conducted by this writer in 1977-78 sought to determine a general set of aims and goals for such a programme (Henderson, 1978). Using a modified Delphi technique, respondent groups were selected whom it was judged had either a vested or professional interest in such a programme. The groups selected were, the students involved, their parents, alternative programme teachers, secondary school principals, academics from Education faculties, and employers. Members of these groups were interviewed (n = 188) to ascertain what they perceived as important aims and goals for an alternative programme. Their answers were content analysed and rewritten as aims/goals statements. Thirty-three distinctively different statements were finally identified and these were then passed through a two round Delphi.

An acceptable degree of consensus was achieved across all sub-groups on most aims/goals. Those statements where consensus was not achieved, or where consensus determined the statements to be relatively unimportant, were eliminated from the final list. All objectives and their rankings are listed in Appendix 1.

The thirty-three statements can each be placed into one of four categories. These are:

Career, or vocation oriented
Personal development
Everyday life
Personal interests

There were an almost equal number of statements in the first three categories (10, 9, 9) considerably less in the fourth (5). The number in each category was purely a function of perceptions expressed during interview. No attempt was made to even up or balance out the number of statements. In a sense the numbers are a first expression of aims/goals priorities, and this is supported by the results obtained in the subsequent Delphi rounds. Over all groups there was no great difference in the priorities accorded career, self development, and every day life objectives but 'interest' type aims/goals are clearly rated as less important. Overall, of the first ten ranked objectives, four relate to everyday life, and three each to career and personal development. In contrast the highest ranked interest aim/goal fills the sixteenth position, and three of the last six positions are of similar type statements.

Generally, the sub-groups supported the same priorities, although there were some distinctive variations. Both students and employers ranked aims/goals concerned with career, and employment as clearly the most important. The first two, and five of the first ten rankings made by students were of this category. Employers were more emphatic in expressing their priorities for career aims/goals. Five of their first eight rankings were in this category, including the top four. Teachers and academics ranked aims/goals in the 'everyday' category as generally most important. Each sub-group rated "preparation for life in society" as the most important single objective, while teachers ranked four of their first eight rankings from this category, and academics ranked five of their first seven from the same category.

Whether teachers involved in the programme accept the findings of this study in detail, or only in broad outline, the views of relevant groups in the community, including themselves, clearly indicate a desire for a balanced curriculum for the alternative programme. This balance should be attained across aims/goals in the career, personal development and everyday life areas. If each and every teacher involved was to make this balance the foundation on which the curriculum was developed much of the confusion and disorder currently in evidence would disappear to the distinct benefit of the students.

APPENDIX

Importance of Aims/Goals, Group and Sub-Group, ranked by Medians

	All	*Students*	*Parents*	*Teachers*	*Administrators*	*Employers*	*Academics*	*Nature of Aims*
Prepare you for life in society and be aware of your responsibilities	1	*9	*6	1	*2	*3	1	E
Help you become independent and responsible for yourself	2	3	*1	2	*2	*9	*2	S
Teach you basic numeracy, so that you are competent with simple problems	3	7	*1	*5	1	1	*8	C
Teach you how to go about getting a job (e.g. interview, personal appearance)	4	*1	*1	3	7	*3	*8	C
Teach you how to work in groups and to co-operate with other people	5	4	*29	*5	*4	*3	5	E
Help you to get to know yourself, the things that you are good at, the things that you are weak at	6	9	11	*5	*8	19	4	S
Teach you how to behave so that you feel confident and at ease when you leave school	7	12	*6	*9	*15	15	*2	E
Teach you about the things you are likely to come across soon after leaving school (e.g. buying a car, tax, H.P.)	8	6	*6	*5	13	22	*18	E
Help you develop your personality and character	9	15	*1	16	*4	12	*8	S
Teach you the things that will be of the greatest assistance in gaining a good job	10	*1	*1	19	*18	*3	17	C

	All	*Students*	*Parents*	*Teachers*	*Administrators*	*Employers*	*Academics*	*Nature of Aims*
Help make you aware of different types of work and what is involved in each one	11	16	*16	*9	*8	*8	*21	C
Teach you to write clearly, accurately, legibly	12	23	*12	4	14	13	*15	E
Teach you how to get along better with other people	13	16	*20	*12	*4	21	*6	E
Help you to appreciate and understand what it is really like to be employed in the workforce	*14	16	*12	*12	17	*9	27	C
Teach you how to speak well and easily	*15	25	*16	14	*15	*17	*6	E
Help you appreciate the importance of continuing learning after you leave school	16	21	*6	*22	*18	*9	*8	I
Help you to be able to make judgements about different social situations	17	26	*12	*9	*8	25	*15	S
Help you to understand what the employer expects when you work for him	18	13	*16	*25	*21	2	*27	C
Help to give you a good understanding of the type of job you can expect to get	19	16	*12	17	20	18	*24	S
Teach you to be a better citizen	20	30	*22	15	*8	*23	*13	S
Help give you a broad general education so that you have a good knowledge about lots of things	*21	*7	*22	*22	25	26	19	I

	All	Students	Parents	Teachers	Administrators	Employers	Academics	Nature of Aims
Teach you about human sexuality, including how to behave with and get along with the opposite sex	22	*13	*20	*20	29	28	*8	E
Assist you to upgrade your levels for the Achievement Certificate	23	9	*22	18	24	*23	30	C
Give you work at school you can be successful with	24	31	*31	*20	*8	29	*13	S
Teach you skills you will use directly in your job (e.g. trade and workshop subjects)	25	5	10	29	30	16	29	C
Teach you the difference between right and wrong	26	28	*22	*31	*21	*3	*18	S
Teach you how a business operates, and where workers and managers fit into the scheme	27	26	*16	27	31	20	23	C
Teach you to assist the less fortunate people in our society	28	23	*22	30	23	27	20	I
Teach you to appreciate cultural things by taking you on outings to museums plays, etc.	29	32	*22	25	26	31	21	I
Teach you about marriage, setting up a home	30	20	22	28	28	32	*24	E
Give you experience in a lot of different leisure activities	31	*21	33	*24	27	33	26	I
Teach you in a more disciplined way	32	32	*31	33	32	30	*32	S
Teach you about safety in industry	33	29	*29	32	33	14	31	C

Nature of Aims

C = Career
S = Self Development
E = Everyday life
I = Personal Interest
* = Indicates equal ranking

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YOUTH — THE DISADVANTAGED

L. R. MILLER

The ultimate term, in contemporary society, according to Richard Weaver, the "god term", is "progress" or "change". We have reached the point where we are beyond debating the inevitability of change. As Louis Kronenberger put it: "for young people today things move so fast there is no problem of adjustment.' The major invarient is the tendency toward movement, growth, development, processes which reflect change. "History in being a process of change" said Dewey, "generates change not only in details but also in the method of directing social change".

Man's destiny is in his own hands. Any law that he can comprehend he can control. He cannot increase or diminish the powers of nature, but he can direct them. Human institutions are not exempt from the pervading spirit of movement. They are artificial, conceived in the ingenious brain and wrought with mental skill born of inventive genius. Our institutions are under attack today, because, in the main, they have been slow to change within a rapidly changing world. Where we have failed in the past is not so much in monitoring changes but to plan so as to remove the dysfunctions created by the chasms that separate expectations on one side and capacity to cope on the other.

This paper will focus on one of the most critical problems confronting our nation today — the future for our youth. I do not propose to present a prescription to remedy the ills, but rather alert you to the problems. The solutions lie not in one mind endeavouring to become the inventive genius to find the workable solution, but rather the effort belongs to all of us working together co-operatively and with a genuine desire to create a better world for those who will live in it in the future.

The process towards achieving a better world lies not in the political arena, not in the financial institutions, not in the great industries, but in every man and woman. If we are sincere in our efforts, dispensing with self aggrandizement and greed and accepting a consciousness through compassionate concern then there is hope.

Peter Jackson, an English economist, stated that each trading nation now faces both more competition for exports and a slower growth in world trade. This means that current policies have generally over-estimated the potential for investment as well as for exports.

That the incidence of unemployment among youth 15-20 age group has escalated dramatically in most countries including USA, Canada, U.K. as well as Australia. In Australia unemployment among youth (15-19 age group) is in some areas in excess of 20%. The question which is being asked is: 'are we setting up a situation in which the young will never be employed', that is, they start off as young unemployed and then "graduate" to becoming the hard core unemployed. Current policies which are deflationary in approach will lead to worsening employment prospects.

In the past much of the unemployment among young people used to be regarded as of a short-run duration, but the present recession is increasing the length of period of unemployment and is tending to lengthen. The period

is often well in excess of 26 weeks, some even face longer periods, some may never be employed. This situation leads to increasing family poverty, since there is a possibility that the young employed come from families where the father is also unemployed. Cut backs in public sector employment has also resulted in the working wives of low income families being laid-off contributing to further family poverty.

The present position in Australia emanates from a particular philosophy which is stated in the following economic policy aimed at:

i. attacking inflation as the prime objective at the expense of other objectives such as cutting back on unemployment and introducing and/or expending social welfare programmes;
ii. controlling the money supply;
iii. boosting private sector investments;
iv. reducing real wages in order to get a profits recovery which will assist private sector investments to expand; and
v. cutting back on public spending to allow the private sector to expand.

The danger of such policies is that they sow the seeds of alienating and disadvantaging large sectors of the nation. Among the young there are visible signs of anti-authoritarianism and psychological depression, of which the worst kind leads to suicide. The societal problems confronting us may be seen through statistics: an increase in the suicide rate, and an increase in crime (234% increase among unemployed as against 40% among the employed group). Adolescent females are tending to have children, not to gain increases in social security benefits but merely to have someone to love and be loved in return.

Where mother and father are working and the son or daughter is not able to gain employment there is family pressure upon the adolescent which reinforces a "failure" syndrome within the unemployed person.

Those of you who work in tertiary institutions or those close to budgetary problems would realize that we are in a no growth state. Present efforts by the Federal government are related to creating a stable economy. The days of growth seem to have passed for many years. Increase in Gross World Product has declined to 2.6% in 1974 and seems to have stabilized. Developed economies have slowed down in their Gross National Products to about ½% to 1%. One of the previously high growth economies, Japan, has slowed down to a less than 1% growth rate. Paralleling with the slow-down has been significant increases in inflation. In Australia the inflation rate has been 11% to 13% over the past four years.

When an economy is confronted with stagnation (as some economists prefer to call it) there is an inevitable effect on employment opportunities — there is a rise in unemployment. Australia has been experiencing, in the last three years, the highest level of unemployment since the Great Depression of the 1930s. The problem of unemployment is not unique to Australia, but among the O.E.C.D. countries Italy is the only country with a higher rate of youth unemployment.

It is very difficult these days to secure accurate figures on unemployment because so much is hidden and the official figures understate the true situation. In December last year, 22.6% of 15 to 19 year olds were unemployed according to a labour force survey.

What are the implications for education? First, the majority of Australians are under 28 years of age. By the end of the century the world's labour force is expected to increase by over 1,000 million men and women. During the next decade 300 million extra people will be seeking work, most of them will be located in the less-developed countries. The focus of the world's workforce has shifted to the Third World economies where wages are low. The economic consequence of this is the relocation of our manufacturing industry in areas where wages are low, and as manufacturing declines in Australia, so too, is there a paralleling decline in a former traditionally labour absorbing sector.

Between 1974 and 1978, 200,000 jobs disappeared from the manufacturing sector alone in Australia. Stated as a percentage that represents a decline of 10% in that one sector alone within a comparatively short period of five years. The present rate of job disappearance is at the rate of 10,000 per week. The Melbourne Institute of Applied Economics and Social Research estimates that the real level of unemployment in Australia is as high as 14%.

There are few people aware of the rapidity of technological change and the impact it is making on the economy, way of life, manpower and our future. As Professor Dexter Dunphy in a paper, "Education and Change" recently pointed out that Australia is now at the forefront internationally in this area. The paradox of the situation is that Australia is one of the world's most backward nations in research, yet in the lead in terms of introducing working technology developed elsewhere. Used as a technological test market for the rest of the world Australia is a marketing expert's laboratory. With half the population centred in two cities, together with the added benefits of being an advanced, representative, developed economy Australia is, therefore, attractive to overseas technological developers.

An organization called The Australian Technology Foundation was established in 1978 as a result of community concern with the effects of technology and has, since its establishment made submissions to enquiries into technology and unemployment, conducted seminars, has developed an educational informational programme for schools, and has engaged upon a series of lectures to various groups. The object of those activities is to alert people to the problem confronting society at present. In a submission to the Myer Committee it has stated, inter alia, the concern for new policies to be established so that a rational approach may be made to endeavour to solve the impending dangers confronting the work force, particularly those in the unskilled, youthful group.

Technological change has centred upon the effects of employment. In recent years, the level of unemployment in the community generally has been much higher than has been experienced for over thirty years and the level of the employment among young people has been chronically higher than the average for the workforce.

It is now becoming clear that an increasing and by now significant, number of people in the community attributes the substantial role of technological change in increasing unemployment and in dampening the prospects of young people gaining employment in the future.

Over the last three decades, the Australian economy has shared the same experience as all developed economies in the world in that there has been two pronounced trends in employment:

i. there has been a relative growth in employment in the services sector of the economy, and
ii. there has been a relative growth of female employment.

The trend towards a larger services sector of the economy has been apparent for some decades (in particular the decline of the rural sector as a source of employment). In more recent times there has been a decline of employment of 4.1% in the agriculture, forestry and fishing industries in a thirteen year period from 1961 to 1974. In the same period there has been a decrease of 3.9% in the manufacturing area, while in other areas, particularly the services, there has been an increase of 8.0%. One can see that the decline in former labour-intensive industries have shown a remarkable shift in decline matched by the equally surprising increase in the services area.

DISTRIBUTION OF CIVIL EMPLOYMENT
IN AUSTRALIA

Sector	*1961*	*1974*
1. Agriculture, Forestry and Fishing	10.9	6.8
2. Manufacturing	26.8	22.9
3. Other (including services)	62.3	70.3
	100.0	100.0

Source: Labour Report, Australian Bureau of Statistics

Reasons for Growth in the Services Sector

Professor Baumol of Princeton University has originated the *"theory of unbalanced productivity growth"*, a term which explains the impact of technology. Baumol's theory is not only relevant to the problems associated with the impact of technology. His theory has had acceptance among economists because of its logic and its feasibility in explaining a new phenomenon in the shift in emphasis of job opportunities.

The theory states that revival of the economy is possible if we view two sectors of the economy: *Sector I* which enjoys a relative high rate of measured productivity growth (and is usually identified with areas of the economy which produce material goods) and *Sector II* which enjoys relatively low rates of measured productivity (usually identified as the service sector of the economy).

71
172

As the theory states, that if *the proportion of total output given by each sector is held constant while total output increases, then more of the labour force will be employed in Sector II* (where measured productivity is lower).

The impact of technology on employment occurs because it is affecting productivity in the services sector in both a direct and indirect way. The direct effects are to be seen by reducing the demand for labour in areas such as banking and in offices through directly replacing workers with machines. The technology advance has challenged the assumption of *no productivity growth* in the service sector. The challenge occurs in an indirect way, and ultimately with a more pronounced and significant impact. Technological advance in intended national and international transmission of television means that performances of say, the performance of a string quartet or a cricket match may be viewed simultaneously and enjoyed by a television audience of immense size. The constraint of limited theatres and sporting areas has at once been removed. Further development of home video and audio recording equipment enables storage to be made for a convenient time and thus the constraint is easier. Therefore, the productivity of "non productive" activities is extended significantly through technology.

Employment trends described earlier may not occur in the future with resulting effects of the possibility of limiting the expansion possibilities in the service sector employment.

In April, the Australian Technology Foundation convened a conference in Brisbane to which were invited student representatives from the secondary schools of the metropolitan area. The keynote address at the conference was given by Sir Mark Oliphant, and typical of the interest shown by him, participated fully in discussions and seemed to enjoy the interaction with the young students who revealed their concerns about the future. At the conclusion of the conference the following resolution was carried unanimously:

> "That we strive to have all segments of society become co-operative so that we may be able to plan for the introduction of technology at a rate which minimizes social disruption with concern for the impact on society, people and environment.
>
> We, therefore, call upon all governments, organizations and individuals to bring influence to bear so as to create opportunities to find solutions to the problems arising from technological advancement through moral responsibility for human consideration.
>
> That this be done in a climate of openness, honesty and in a sincere manner in the national interest."

The resolution represents an action framework from which new policies could emanate if a climate of national responsibility were so engendered among all levels of society.

The problems confronting unemployed youth are not only economic in nature, for among the consequences are psychological and sociological factors which are likely to create additional and long lasting problems for society.

Since 1965 the heaviest burden among the unemployed has been carried by youth. There are many causual reasons for this phenomenon, some of which will be enlarged upon later in this paper. Among the casual bases

may be identified the following: (i) the technological intrusion creating structural unemployment through job displacement particularly those previously occupied by youth; (ii) a decline in secondary industries which was a previously high youth employment absorbing sector; (iii) curtailment of growth in the public sector; (iv) the economic recession which reduces the opportunity of industrial expansion in areas likely to absorb large numbers of employees, particularly from new aspirants; (v) the slow-down in the development of labour absorbing industries particularly during a period of low-risk taking; (vi) reduction in wage differentials between adult and junior wage structures; (vii) increase in the expectations of individuals; (viii) absence of national manpower policies and planning; (ix) changes in consumer demand; (x) the effects of international trade; the growth of multi-national corporations and the mobility of capital; (xi) the growth of capital intensive industries utilizing technology; and (xii) the lack of definition of work and the absence of clarification of initiatives in a purposely planned way to achieve more positive outcomes.

It is necessary to understand the consequences of oscillations of national employment. During periods of full employment labour is in competitive demand from employers. At this period of time all idle resources and equipment are fully utilized to satisfy the market for demand for goods and services. Employers are anxious to utilize all productive units to maintain production outflow, and during this period there is greater mobility of labour and an upward social trend. Conversely during periods of high unemployment there is a downturn in consumption and many resources lie idle. Employees now are placed in a competitive position where the supply of labour exceeds the demands for labour. Employers become more selective, and are able to select employees with the best qualifications, best potential and best attributes. Those persons lacking the desired skills required by employers have a decreased opportunity of entering the workforce. As technology develops and displacement of opportunities in unskilled areas of employment continues there are limited opportunities for low academic achievers. As the market for labour becomes one of competition and the selection criteria for positions rises there are inevitable consequences — those who are less academically able become alienated.

In the period of high unemployment there is usually the attempt to look for "scapegoats" as a causality for the prevailing condition. In recent times the "scapegoat" being prepared for the sacrificial offering has been the school. The premise used is that standards in schools are declining. However, recent studies reveal that standards have not declined but have, in some areas, been greatly improved upon. This is particularly so in the area of conceptualization. Schools are not, nor have they ever, deliberately endeavoured to produce groups of semi-literates. Since the Second World War we have seen, in Australia, an educational explosion. The numbers of students staying on at school past grade 10, the numbers of graduates from universities and colleges of advanced education and technical colleges would serve to indicate an overall remarkable increase in the level of education among Australians. Queensland is a case in point. Many of the problems which have brought conflict in that State, in part, may be explained by the comparatively recent introduction of universal secondary education. Prior to this advent Queensland

had the lowest level of education in Australia. Comparison with the past must support the evidence that the position has greatly improved. The third part of the premise is that jobs are available belies the fact that there is an unemployment level of 500,000. In certain areas the competition for jobs is intensive. In Ipswich, for every job vacancy there are up to 300 applicants. On this evidence could it ever be logically presumed that 299 are semi-literates; or that schools are failing because there are insufficient jobs for those who require work?

Further, during a recession period the tendency towards conservatism increases. Conservatism is enmeshed with conformity and norms espoused within a conservative society; and those who do not subscribe to those norms become alienated.

The reality of the present position is that for youth it has become increasingly more difficult for them to break into the workforce. Many of those who would seek employment at the end of grade ten are returning to school, but for the academically less able the curriculum is not appropriate for their needs and aspirations. Evidence is being revealed that there is increasing demoralization occurring which correlates with unsuccessful attempts to locate opportunities. The failure syndrome sets in until a demoralized stage is reached when there is rejection of the establishment and the rejection of the norms of society. Alienation is strongly felt and an entrenched anomie manifests within the individual.

Research being carried out by Jim Sweeting and the author clearly shows that there is a pronounced school effect. The school effect is sensed through continuing alienation which occurs among low-achievers (the lowest third of groups). The established systems of education in Australia which are elitist, oriented towards middle class values, and serviced by teachers from middle-class backgrounds, are in general out of step with the needs, difficulties and value systems of those who are not middle-class. The academically inclined child knows well how to use the system, is strongly supported within the home environment and generally knows the rewards which accrue to the successful. The disadvantaged, however, are lacking in the opportunities available, and in the general absence of necessary motivation in the homes, coupled with a lack of financial support to be able to forego opportunities for long-term returns. However, the position has now worsened for those students — the jobs to which they would enter on leaving school are no longer there. Technology is displacing job opportunities for youth. Employers seek experienced, qualified and mature persons. Thus, many youth are caught in a desperatete Catch 22 situation. If they leave school in search of work, which is not available, and for survival sake and enrol for social security they become labelled as "dole bludgers", and if they are not academically inclined, but return to school, they find that the education offered is tailored for the academic elite and are not able to cope. This in turn has the effect of deepening the psychological aspects of the failure syndrome upon the individual. To rephrase what I have just stated — for the lowest 30 per cent in the academic level of the educational system, there is a deepening of their disadvantaged position. Early failure to cope meant continuing failure for so many. Under conditions of full employment for so many of

the low achievers there was a passive resistance which they acquired the right to leave school, that is, they had reached the statutory age prescribed by law to enter the workforce. Today many of those unable to gain jobs after completing grade ten now return to school to find that the curriculum does not offer much hope — the academic level is too high and the curriculum inappropriate resulting in the failure syndrome intensifying.

In Queensland, the Board of Secondary School Studies approves of all board-level courses and these are related to entry into higher education through matriculation requirements. Attempts by schools to introduce alternative programmes with specially designed curriculum generally fail because of lack of parental support. Parents view those alternative programmes as lacking the status necessary for their children to be successful in a competitive market.

This seems paradoxical to my argument earlier supporting schools. When we had full employment there was no necessity to challenge the system of education. Individuals were able to make a choice: either leave or go to work or to stay on at school and achieve matriculation to tertiary institutions. The range of ability levels has not altered. But, what we have today is that jobs for youth are not available in great numbers. Once, the junior employee who became the lacky of the office is now displaced by technology. Memory typewriters have displaced the females in an office, coupled with photocopying processes, automatic collators, computers and micro recording of records for storage. For boys the position is similar. Present federal policies are now geared to increasing our technical skills. But, we have been duped by our own folly. Decline in the technical skill area has not been, as erroneously stated by some observers, that there was a deficiency of aspirants for trades training. The fact has been that under the apprenticeship scheme employers were unwilling to accept responsibility for accepting the numbers of applicants who came forward. Any decline in the technical area has arisen from an absence of manpower policy and a short-sightedness by employers to understand a pending national critical situation.

The lack of responsibility among employers is clearly seen in the new policies likely to be forthcoming in the trades training area. Changes now under way in Technical and Further Education in Queensland will bring about a new era in the training of technicians. From a common basic core course which all entrants will take the individual students will then decide on the specific areas of interest they desire to pursue. Commencing again with a common core in that general area, say construction, electrical or mechanical, there is then a further extension into the specific area of specialization. The advantages of this new proposal is that individuals do not have to seek a willing master for apprenticeship and that a specific choice of interest does not have to be made upon leaving school, but through a process of training an individual will be able to determine his interest and come to understand his own limitations or aptitude and make more appropriate decisions. Further, the method of training lends itself well to recurrent education. This will become the trend for the future. As various technical skills are displaced by more advanced skills then retraining will be essential. Many of the jobs which will be performed in the future by those attending school today are not yet in existence.

176

While I have supported the new thrusts in the trades training area, I have one deep concern. Where under the apprenticeship scheme there was a sharing of the cost of training between the private and public sectors, there will now be a shift in the cost to the public sector. This means that employers are able to abbrogate another area of responsibility.

A national committee of enquiry, The Williams Committee was set up in October, 1976 to enquire into education and training and to undertake a review of possible developments in Australia up to 2000 A.D. The major terms of reference were to investigate the provision of educational facilities and also the relationship between the educational system and the labour market.

Published in February, 1979, The Williams Report made recommendations which were wide-ranging, but quite considerable attention was given to the problems of transition from school to the work-place. Note was taken of the criticism which has been made that many seeking employment completely lack any knowledge of the world of work. One recommendation was that there should be an expansion of the curriculum so that the transition from school to work can be facilitated. Facilitation for achievement recommended that "Ministers for Education should initiate public debate and through systematic consultation with community and business groups to clarify objectives of schools and to set reasonable limits."

In a study carried out under my direction at the University of Queensland was in essence a response to the recommendations of the Williams Committee. The project aimed at *systematically* consult with the community and business groups concerning what changes should be implemented in schools if they are to help youth cope with the rapidly changing technological world. The aim was at producing a consensus list of changes which the community feels should have priority for implementation if youth are to cope with such a world.

A four-round Delphic probe was used to gather the data. A population sample of 160 of selected persons, comprising eighteen categories of persons formed the basis of the study.

Of the 320 statements received from round one, these were collapsed into 39 statements which subsumed the total received without losing the significance of any of the original statements. This, then, formed the basis of the other three rounds in the probe.

The question posed was:

> "To help youth cope with their changing world, I would think that schools and other educational institutions should, by 1983, do the following two things":

The ten highest rating suggestions were, in rank order:

1. Encourage students to develop critical thinking, problem solving and discovery learning methods;
2. Reduce class sizes and increase the number of teachers to increase student choice of subjects;

ATA77

3. Emphasize basic communication skills through the curriculum;
4. Increase staff to cope with remediation problems;
5. Make students more aware of job opportunities and make the transition between school and employment smoother;
6. Encourage students to develop attitudes positively related to a high self-respect, and a respect for others;
7. Introduce within the curriculum job-seeking skills;
8. Increase the number of courses available to students and include practical subjects as well as academic ones;
9. Prepare students for the transitions to higher levels of education and for post-school life;
10. Foster in students positive attitudes to community service and responsibility.

The least favoured were:

1. Prepare students to cope socially in a changing world by increased use of teaching by discussion and by providing out of class activities;
2. Eliminate unnecessary subjects (e.g. history, art);
3. Place particular emphasis on the training of academically less able students for future employment;
4. Remove religious education from the upper secondary school;
5. Introduce pre-apprenticeship training with work release for those students who require it;
6. Develop more competitive attitudes among students;
7. Decrease the present emphasis on qualifications for tertiary entrance;
8. Institute training in the development of software, nature of hardware and the operation of the device;
9. Include more vocationally oriented subjects in schools prior to Year 10;
10. Courses should be developed which lay stress on the development of free expression, presentation of self, and responsibility.

High Order Skills

In contrast to a general impression that the community favours a "back to basics" movement, the results of the study indicate that respondents favoured the development of skills such as critical-thinking, problem-solving and discovery learning methods.

Social Education

Respondents also saw the education system as having the responsibility for developing students socially so that they could have better communication skills, positive attitudes and a responsibility to the community as well as to oneself. In the planning of such courses, there is an indication that the development of competitive attitudes should not be stressed; course work

178

involving teaching by discussion only should be avoided; and courses should not lay too much stress on the development of free expression or the presentation of self, which could be interpreted as meaning a non-structured, individualistic and undisciplined approach. It was thought that religious education still had a place among senior school students.

Vocational Guidance

Priority was given to the development of courses that facilitate the transition from school to work (or university). Job seeking skills and job awareness programmes should be available. Respondents thought that there should be an increase in the number of courses and should include practical as well as academic ones. There can be seen, however, certain reservations to this priority in the following low priority statements:

1. An increase in practical and vocationally oriented subjects should not be made at the expense of so called "unnecessary" subjects such as History and Art;
2. The present emphasis on qualifications for tertiary entrance and the training of academically able students should not be sacrificed, and
3. The classroom should still remain the centre of learning and vocationally oriented should not be introduced prior to Year 10.

One major study commissioned by the Williams Committee was a study carried out by Collins and Hughes (1979). An investigation was made of the Expectations of Secondary Schools in which the views of New South Wales parents, teachers and students were sought. Each group was asked to indicate the importance of various educational aspects and in their opinion, "what is" and "what should be" done in schools. The results indicate that those most closely connected with Seconary Schools have, on average, the following views:

Secondary schools should improve their teaching of:

i. Clear and effective speaking. (SOCIAL EDUCATION).
ii. Knowledge and skills that are directly relevant to finding and holding jobs. (VOCATIONAL GUIDANCE).
iii. Other clearly practical skills including areas such as money management. (SOCIAL EDUCATION).
iv. The knowledge and skills that lead to personal autonomy. These include self-understanding and self-confidence as well as rationality, and ability to find information and independent work attitudes. (HIGHER ORDER SKILLS).
v. An understanding of social issues. (SOCIAL EDUCATION).
vi. Manners and punctuality. (SOCIAL EDUCATION).

The similarities of findings from the Brisbane study and to Hughes-Collins study in N.S.W. serve the need for planning and policy-making in these areas of education, if youth are to cope with their changing world.

179

Not only do we have to find useful employment for youth, but we as educators are charged with the responsibility of setting a climate whereby we assist youth in fulfilling a useful function in life as human beings.

A new area of psychology has emerged and, that is, the discovery of the "self-image" which has meant a breakthrough in the field of creative personality. Self-image is the key to human personality and human behaviour. Change the self-image and you change the personality and the behaviour. The "self-image" sets the boundaries and individual accomplishment. It defines what one can do and cannot do.

Clinical evidence, as Maltz points out, that in the fields of industrial psychology, and psychosomatic medicine reveals a variety of personality types — success-type, failure-type, happiness-prone, unhappiness-prone. Linked with the development of studies of the "self-image" is the power of positive thinking. There is much evidence to show that the brain and nervous system operate purposefully in accordance with the known principles of Cybernetics to accomplish goals of the individual. Insofar as the brain and the nervous system constitute a complex goal-striving mechanism, much depends on the operator setting the goals for the system to function positively.

Cybernetics, which began as a study of machines, and restored teleology as a respectable concept in Science, grew out of the work of physicists and mathematicians rather than of psychologists, especially when it is understood that Cybernetics is the goal-striving, goal-oriented behaviour of mechanical systems. Cybernetics, goes far to restore the dignity of man as a unique, creative being. Psychology, which began with the psyche of the human being, or soul, almost ended in depriving man of his soul. The behaviourist, who did not understand man or his machine and thereby confused one with the other, told us that thought is merely the movement of electrons and consciousness, merely the chemical action — "will- and "purpose" were myths: Cybernetics does not make this mistake. It does not tell us that "man" is a machine but that "man" has and uses a machine. It also explains how that machine functions and how it can be used.

Self-image is changed, for better or worse, not by intellect alone, nor by intellectual knowledge alone, but by "experiencing". Wittingly or unwittingly one develops a self-image by creatively experiencing the past. Change occurs through the same method. It is not the child who is taught about love but the child who has experienced love that grows into a healthy, happy and well-adjusted adult. Our present state of self-confidence and poise is the result of what we have "experienced", rather than what we have learned intellectually.

Maltz suggests that a good personality may be defined as one which enables the individual to deal affectively and appropriately with environments and reality, and to gain satisfaction from reaching goals which are important to the individual.

The "success-type personality" is explained through the seven letters forming the word "success". The framework is thus:

S Sense of direction
U Understanding
C Courage
C Charity
E Esteem
S Self-confidence
S Self-acceptance

In each specific unit forming the success personality are elements and prescription for the development towards positive achievement. I would to educators that here lies a key to unlocking the future of youth. There has to be a new development in the structure of schools, new curriculum design, co-operation with the community, and better means of communicating our activities with parents so that they better understand the realities confronting their children.

In an endeavour to cater for the low-achievers at the grades nine and ten level I have been working on the development of a programme format for the development of materials that could be used in schools to improve the employment prospects for low-achievers. While such a task is a mammoth one for any one individual it became necessary to limit the programme to vital areas identified by employers as being the critically deficient areas among low-achievers. Five units have been developed to date and trialled among grade nine students at a school in the Ipswich area in Queensland. Results to date have proved to be highly successful with a genuine and definite interest being generated among students who come to understand the relevance and importance of acquiring such personal skills. As the programme is still embryonic it will take time to measure the effects. At present I am working on a purse-string budget and until a large amount of finance is made available development will necessarily be slow. Conclusive results cannot be indicated at this stage, however, if enthusiasm shown by teachers and students is any valid measure, then one could be excused for assuming that the exercise fulfills a need in education. As problem areas seem to be so numerous, teachers appreciate assistance.

The programme is illustrated in the appendix to this paper. There are three major areas: communication and personal development. These are the three most critical areas emanating from research among the significant business leaders in Queensland commerce, industry and also from representatives of trade unions and governments.

In conclusion, may I quote a message once given by Robert Oppenheimer:

> "In an important sense this world of ours is a new world in which the unity of knowledge, the nature of human communities, the order of society, the order of ideas, the very notions of society and culture have changed and will not return to what they have been in the past. What is new is not new because it has never been there before, but because it has changed in quality. One thing that is new is the

181

prevalence of newness, the changing scale and scope of change itself, so the world alters as we walk in it, so that the years of man's life measure not some small growth or rearrangement or moderation of what he learned in childhood, but a great upheaval. What is new is that in one generation our knowledge of the natural world engulfs, upsets, and complements all knowledge of the natural world before. The techniques, among and by which we live, multiply and ramify, so that the whole world is bound together by communication, blocked here and there by the immense synopses of politcal tyranny . . . What is new in the world is the passive character of the dissolution and corruption of authority, in belief, in ritual, and in temporal order. Yet this is the world we have to live in. The very difficulties which it presents derive from growth in understanding, in skill, in power . . . We need to recognize the change and learn what resources we have".

Finally, as Professor Dunphy points out that some of the greatest educators the world has known — Socrates, Christ and Buddha travelled light and used what come to hand. To educate a person is different from spending some years at school, however magnificent and well equipped such a school might be.

What counts in education in the ultimate is the maturity, humanity and genuine knowledge of the teacher, the personality and attitude of the pupil and the living relationships, the exchange between teacher and pupil. But, let us all in this society work together, co-operatively, with sincerity, trust and openness in all our efforts. Perhaps then, we may be able to assist youth in a much better way than we are achieving at present.

Appendix

FRAMEWORK OF PROGRAMME FOR
IMPROVEMENT IN PERSONAL SKILLS

Developed by L. R. Miller

1. *COMMUNICATION*

ORAL: (a) *GENERAL:*

i. Approaches designed to improve oracy.

ii. Recognition by the individual of the importance of oral communication.

iii. Encouragement of individuals to improve one's performance.

(b) *SPECIFIC:*

Design of tasks and exercises to improve individual confidence, fluency, tone and vocabulary.

WRITTEN: (a) *GENERAL:*

i. Approaches designed to heighten understanding of the importance of written communication.

ii. Recognition by the individual of the importance of written communication and its appropriateness.

iii. Encouragement of individuals to improve one's performance.

(b) *SPECIFIC:*

Design of tasks to improve written expression related to everyday life (reports, forms, business letters and documents, applications for positions (employment), invitations, acceptances, etc.).

2. *PERSONAL DEVELOPMENT*

(A) *SELF*

i. *PHYSICAL:*

Societal expectations: deportment, health, presentation of self, visual impact on others, confidence, respect for self.

ii. *MENTAL:*

Communication, listening, responding, initiating discussion, alertness, self-motivation, behaviour, understanding of desirable attributes within society.

(B) *OTHERS*

i. *ACTION*

How others might perceive you. The presentation of self, the acceptance of others. Concern for others. Responsibilities for actions, behaviour. Effect of one's actions on others. Understanding, tolerance, prejudice-free actions, openness.

ii. *REACTION*

How we relate to and react to other people.

Contexts.

How we portray competence, confidence.

Acceptance.

How we make others feel comfortable, welcome.

3. *THE VALUE SYSTEM*

Understanding of and meaning of values, the moral being, the identity of self within the value system.

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183

LINK COURSE DEVELOPMENT IN SOUTH AUSTRALIA

J. A. HILL

Introduction

Link Courses are integrated transition programmes jointly developed by secondary schools and post secondary agencies to help bridge the gulf between school and work and further study. They include a wide range of courses across Years 10, 11 and 12, varying in length and status.

Background

(a) In the United Kingdom Link Courses have been developing for about 20 years. They are specifically designed for 15 and 16 year old secondary students who attend Colleges of Further Education for one afternoon per week throughout two or three terms or attend on a block release basis for two weeks after examinations. Usually the secondary students are introduced to three, four or more broad vocational areas such as mechanical or electrical or automotive engineering or business studies. Link Courses gained impetus in U.K. as a result of raising the school leaving age to 16 years in 1972.

(b) In the U.S.A. the Federal Government's Vocational Education Act of 1963 had the effect of placing more emphasis on employability of young people and evaluation of career education programmes. Previously Sputnik had the effect of placing more emphasis in secondary school on pure science and mathematics, and removing vocational training from the curriculum.

However, since 1972 the U.S. Office of Education has funded six large scale models of Education-to-Work Linkages in Georgia, New Jersey, Michigan, Colorado, Arizona and California. Also 52 mini-models of "exemplary career education programmes" have been funded under the Vocational Education Act implementation in all 50 States and in Puerto Rico and the District of Columbia.

The U.S. Office of Education policy has been to emphasize career *awareness* at the primary school level, career *exploration* at the junior high school level, and career *choice* and *implementation* at the senior high school level. These goals involve study of the world of work through the instrument of fifteen clusters under which all occupations are categorized.

The National Institute of Education gives highest priority in research to career education programmes. A most significant Report derived from this research is "Bridging the Gap: a Study of Education-to-Work Linkages", prepared by the College Entrance Examination Board (June 1975). One note of warning in this Report is timely: "The dangers in building tight linkages between schools and employers include the creation of narrow training programmes lacking educational value, over-responsiveness by the school to unstable conditions in the labour market, and reliance on manpower demand projections that may not be accurate for the short term and are less so for the long term". (page 33).

(c) The need to develop Link Courses in Australia is supported by a substantial body of opinion. Both the second Report (1975) of the Australian Committee on Technical and Further Education and the first Report (1976) of the Technical and Further Education Commission advocated Link Course development. TAFEC stated (page 176, paragraph 7.62):

> The Commission hopes that Australian TAFE institutions might be willing to develop the concept of link programmes. It seems such programmes as providing general familiarisation in a variety of disciplines. There appear to be several advantages of such programmes over the work-experience programmes for secondary students which are being instituted in several States. First, TAFE colleges are more likely to have under the one roof the facilities and staff to acquaint school children with a wide range of vocational experiences than are individual local industrial or commercial firms; second, link programmes, unlike work-experience programmes, would not introduce such problems as the students' eligibility for payment for work done or workers' compensation; third, not only would preliminary experience in TAFE institutions gained during link programmes assist school students to make informed career and education choices when they leave school, but the knowledge of TAFE among secondary school teachers and administrators involved in the programmes would also increase.

The Tertiary Education Commission Report (1978) has supported the advice of the Technical and Further Education Council (page 149, paragraph 46):

> The Council believes that during the 1979-81 triennium Commonwealth support of such programmes should continue but be focused more precisely in directions that reflect the national interest. It suggests that appropriate foci would be the improvement of TAFE's capacity to prepare people for work and the development of alternative learning processes. The first is a response to legitimate national concern to upgrade the skill level of the workforce and to overcome some of the problems outlined in the recent OECD report on 'Transition from School to Work or Further Study'.

The Williams Committee of Enquiry into Education and Training (February 1979) recommendations include:

> That secondary schools accept that they have an obligation to assist pupils in transition from school to work, and that School Principals give systematic attention to greater liaison between secondary schools and TAFE in the joint development of link courses and the interchange of resources and staff (Vol. 1, page 132, R4.20).

The Second Report of the Commonwealth/State Working Party on the Transition from School to Work or Further Study (December 1978) recommendations include:

- That TAFE Colleges should have closer contact with secondary schools and provide more information on courses available, especially Link Courses and those courses suitable for early school

leavers, at an early stage of the school year (Recommendation 8, page 42).

The Report of the Careers Education Working Party, Education Department, Tasmania (November 1978) recommendations include:

- That a Transition Education Development Group be formed within the Curriculum Branch to co-ordinate transition education and to encourage and support transition education innovations in schools and to assist in their evaluation. In exercising these functions it is envisaged that this Group would be responsible for facilitating link course development within the department through liaison with the existing Link Course Development Committee (Recommendation 3.2, page 20).

The Report of the National Seminar on the Provision of Linked Courses in Australia (June 1978) recommendations include:

- That the Directors-General of Education, Directors of Technical and Further Education, and Ministers of Education should:
  - ensure that funds be made available for adequate research, development, implementation and evaluation of linked courses;
  - encourage secondary and post secondary institutions at the local level to carry out research into students' needs, joint curriculum planning and design of linked courses;
  - promote the support and co-operation of TAFE Directors, the TAFE Council, the Schools Commission and the Curriculum Development Centre;
  - consider the need to appoint staff to provide liaison between secondary and post secondary institutions.

(d) In South Australia Link Courses have developed since 1975 mainly due to local initiatives in the various Colleges of Further Education and nearby secondary schools.

In 1976 a Working Group, consisting of Senior Education Officers of both the Education Department and Department of Further Education, was established to advise on ways in which curriculum co-operation between the two departments could be achieved. This group invited people from both departments to contribute ideas concerning Link Courses, sharing of resources, and alternative Year 11 and Year 12 programmes.

In 1977 the Working Group published "Curriculum Co-operation", which recommended development of Link Courses throughout South Australia for secondary students, and joint curriculum planning between staffs of secondary schools and Colleges of Further Education.

In September 1977, and April 1978, Link Courses Conferences, with State wide and international representation, were conducted in Adelaide.

At the April 1978 Conference guest speakers were Mr Michael Sharp, TAFE Consultant on Link Courses, and Professor Harold Skamser, of California State Polytechnic University.

There were papers given by Mr L. A. Kloeden, Director-General of Further Education, Mr J. R. Steinle, Director-General of Education, Mr M. H. Bone, member of Commonwealth Committee of Inquiry into Education and Training, Mr Malcolm Strange, Superintendent of Schools, E.D., Mr R. B. Mathers, Superintendent (Curriculum Development), D.F.E., and Mr R. W. Thomas, Deputy Head, Technical Studies, South East Community College. Chairmen of the general discussion and plenary discussion sessions were Mr M. J. Pederson, P.E.O. (E.D.), and Mr J. A. Hill, P.E.O. (D.F.E.).

At present in South Australia 2 100 secondary students from over 100 secondary schools, government and independent, attend Link Courses at 20 TAFE Colleges. Most of the 60 different Link Courses are of the career awareness type catering for Years 10, 11 and 12 students. Awareness type courses of 3 or 4 hours per week introduce students to three of four vocations in the technical or business or rural and timber studies areas.

Transition Education in Perspective

(a) *Career Education*

In the Report of the Working Party on Transition from Secondary Education to Employment (1976), career education is defined as "a long term process involving knowledge of self, the world of work and the development of decision-making and planning skills" (para 9.6). In South Australia career education is not regarded as a separate subject area, but as a vital part of general education which needs to be integrated into the curriculum for all students.

(b) *Transition Education* is the total education programme which provides young people with knowledge, skills, and attitudes appropriate for life beyond school. Transition education includes career education, work experience, link courses, alternative Year 11 and 12 programmes, counselling, and all activities which broaden young people's understanding of the world of work and further study.

Transition Education is not a panacea for youth unemployment: schools have not control over economic recession: they cannot create more employment. However, Transition Education contributes to youth employability by increasing career oriented knowledge and skills, opportunities for clarification of attitudes and values, occupational awareness, self knowledge, interpersonal skills, and preparation for transition to possible employment and further study.

(c) *Work experience* is a transition education programme, which involves students' participation in the work situation, while they are still attending school. Usually the aims of work experience programmes are to provide opportunities for vocational sampling, social contact with working adults, perception of the educational relevance of school to work, and involvement of parents and employers in students' educational process. The emphasis given to particular objectives reflects the different attitudes and values of students, parents, teachers and employers. There-

fore all these people should be involved in formulating specific objectives of work experience programmes in a particular learning environment.

Work experience is regarded as a component of transition education and not as preparation for a specific job.

Difficulties encountered in Work Experience include:

- placing students in the more highly skilled vocational areas;
- placing an increasing number of students at a time when economic recession is creating high levels of unemployment;
- funding of work experience programmes, particularly the costs of teacher supervision, teacher replacement and travel;
- maintaining student enthusiasm for work experience when job opportunities are declining;
- providing students with adequate awareness of employer expectations and employer attitudes.

(d) *Link Courses* are complementary to Work experience in the total transition education programme. Link Courses differ from Work Experience in that they provide a more sheltered learning environment, specifically designed by the secondary teachers and post secondary lecturers, to overcome weaknesses and accentuate strengths in particular students. Link Courses enable students to gain confidence in the shallow end of the pool before tackling the deep end, which may be encountered in a work experience programme.

Implementation of Link Courses has problems to overcome too, but the task is considerably easier if administrators, teachers, students, parents, employers, and all concerned in transition education have a sound *conceptual basis* on which to place Link Course programmes and a sound *methodology* for their implementation.

Aims of Link Courses

(a) Much uncertainty and confusion concerning aims of Link Courses are overcome if two categories are distinguished: these are *Awareness* Link Courses and *Examination* Link Courses.

(b) *Awareness* or *Taster* or *Orientation* Link Courses are those in which Year 10 or Year 11 students spend several weeks of one day or half-day each week being introduced to three, four or more broad vocational areas in a post-secondary institution. Some *Awareness* Link Courses may be arranged on a one-off block release basis at different times of the year which best suits both secondary and post-secondary institutions.

Examination Link Courses are those in which some of the syllabuses are taught in secondary school and the rest in a local college as part of an integrated programme for an examination in Year 12. These link courses are assessed and accredited according to the criteria of general acceptability of Year 12 level.

Examination Link Courses extend throughout Year 12, and require similar amounts of intellectual effort, with adequate breadth, depth and balance of topics, as are required by other Year 12 courses.

(c) Aims of *Awareness* Link Courses are:

- to broaden the foundation of a sound general education, including preparation for employment, coping with possible unemployment, and creative use of leisure.
- to equip all secondary students with knowledge and skills to choose a career more wisely.
- to extend the educational choices; to widen the *options* for secondary students' further study.
- to provide students with more awareness of the world of work.
- to enable students to experience alternative teaching methods and to study in a more adult environment.
- to help students gain some knowledge, skills, attitudes and values which are useful personally and may be of some advantage in the labour market.
- to help students understand that their other school work is relevant to, and may be practically applied to their vocational interests.
- to have access to a variety of short programmes including vocational and leisure activities, and orientation.
- to develop decision-making and planning skills in introducing secondary students to some of the problems likely to be encountered in industry and commerce.
- to remove barriers between school and adult society.

(d) Aims of *Examination* Link Courses include those outlined for Awareness Link Courses but also seek:

- To provide secondary students with an *accredited qualification*, recognized by employers, post-secondary institutions, and by the public as equal in value to other Year 12 studies.
- To ease the transition from secondary education to further study and work.
- To motivate students to seek recurrent education throughout their lives.
- To enable senior secondary students to study a topic more rigorously to meet vocational aspirations.
- To enable senior secondary students to become more aware of the variety of post secondary courses available and of the many agencies which provide educational and vocational counselling.

Integration of Link Courses with the Curriculum

(a) *Link Course Co-Ordinator required*

In order that Link Courses may be implemented and integrated with the school curriculum it is essential that a Link Co-Ordinator of senior status be delegated the authority to organize Link Courses activities in each school where they operate. Duties of the Link Co-Ordinator include:

- to promulgate aims and objectives of Link Course, both awareness and examination types, among students, parent, teachers and employers.
- to discover the individual needs and aspirations of students.
- to provide adequate counselling and information to students concerning the range and types of link courses available, or which may be developed, to meet their needs.
- to organize both secondary and post secondary staff to *jointly* develop the Link Course curriculum, with due consideration to breadth, depth and balance of topics, and adequate variety of theory and practical experiences.
- to see that the quality of teaching staff, quality of accommodation and facilities available, and methods of assessment of student progress, in the educational institutions which provide the Link Courses, are adequate.
- to be sure that a wide spectrum of vocational and further education opportunities are available to secondary students.
- to provide opportunities for *staff development* so that staff skills, knowledge and expertise are adequately co-ordinated and shared equitably between the two institutions involved in Link Courses.
- to develop liaison with school and College staff and councils, employers, parents, unions, tertiary institutions, government departments and other external agencies for the purpose of gaining information and support.

(b) *Importance of Link Course integration with curriculum*

The value of Link Courses is seriously diminished if they are seen as isolated units unrelated to other school subjects. They must have status equal to other valid educational experiences.

A Link Course component may be integrated with a traditional course, e.g. an Examination Link Course in Electronics may be integrated with a Year 12 Physics and Mathematics course.

The full range of students, scholastic abilities should be catered for in Link Courses and should not be limited to any particular student group.

The variety of Link Courses reflect the varying needs of students: for example Link Courses in Business Mathematics may be integrated with a Year 12 Mathematics course for a student interested in a commercial career. This student may complement his Link Course with a Work Experience programme in a bank or insurance company, where his Business Mathematics can be applied to a useful task of mutual benefit to the company and the student. The value of the Business Mathematics Link Course to this hypothetical student is threefold:

- he is applying the traditional Mathematics and Business Mathematics to a practical task and gaining useful experience.
- he is using his traditional mathematics unit towards a Year 12 Certificate qualification.
- he may use his Business Mathematics unit towards a Business Certificate recognized by employers.

Potential Problems to be recognized

The following list of potential problems is by no means exhaustive.

(a) *Community attitude to innovation*

Some conservative teachers, by virtue of their own educational experience and professional training, tend to encourage and perpetuate the academic path. Because they are not aware of opportunities available to school leavers in commerce and industry, the effectiveness and value of their advice concerning careers is limited. Attitudes of secondary teachers to trade training and commercial careers are gradually improving but some teachers find it hard to accept the concept of curriculum co-operation with TAFE Colleges.

Despite the obvious need and more varied transition education, there are some parents and employers who resist changes to the traditional formal academic curriculum.

(b) *Credentialism*

When there are many more applicants than jobs, employers tend to choose applicants with the highest academic qualifications. Too often employers regard the credential rather than the quality of the education to be most important.

Often individuals have to acquire higher academic qualifications so that they have better credentials than their competitors for a job, even though these academic qualifications are not relevant to the required tasks and duties of the position.

There is a need to convince employers that they should employ the applicant with the most relevant training and the most appropriate education rather than the applicant with the highest academics.

Nevertheless, it is realistic to upgrade the status of Examination Link Courses so that they can be accredited by the appropriate academic Board or Council and thereby become accepted by employers and the public as equal in esteem to other Year 12 Certificate courses.

(c) *Difficulties in Implementation of Link Courses*

Provision of Transition Education, such as a wider variety of curricula, incorporating Link Courses and Work Experience, has implications for more flexible school organization and timetabling. More funds are required to provide transport, extra facilities, more materials and management resources.

Where the Principals of the Schools and TAFE Colleges are strongly motivated to regard students' needs for transition education as of paramount importance, the problems of school organizational structuring and timetabling, and of the provision of funds and management resources, are usually capable of solution.

The appointment of a staff member or the delegation of authority to a member of staff to carry out the duties of a Link Course Co-Ordinator is essential. There are many administrative arrangements and staff development tasks which are essential for the proper implementation of Link Courses.

(d) *Educational Validity*

Moderation, assessment and accreditation of Examination Link Courses, particularly the integration with present formal secondary school courses are complex.

Some Year 12 Examination Link Courses are accredited by the South Australian Department of Further Education and are recognized as Certificate course units.

The Jones Committee of Enquiry into Year 12 Examinations in South Australia has supported assessment, moderation and accreditation of Examination Link Courses in its proposed Year 12 Certificate which it recommended to replace the present Matriculation Certificate.

To encourage public and, in particular, employer acceptance of Examination Link Courses they need to be accredited for secondary and post secondary qualifications and thereby acquire portability or status for transfer of credit.

(e) *Legal Responsibilities*

Responsibility of the Principal of Secondary School

The Education Department owes a duty of care to a student participating in a link course to the extent that the Principal must ensure that the student does not undertake any activity that, considering his age and maturity, may place that student in danger of sustaining an injury, and must also ensure that the student is under the supervision of a mature and responsible person.

Responsibility of the Principal of the College of Further Education

The Department of Further Education owes the same duty of care to the student as it does to its own regular students, bearing in mind that the duty of care is a qualitative one, varying according to the student's age, maturity, experience and the nature of the risks to which the student is exposed.

The TAFE College must adopt the role of "a caring parent" towards link course students to the same extent that the Education Department does for students under its care, subject to variation as necessary in the light of the student's age.

The TAFE College has a clear legal obligation to provide safe working conditions for its students, particularly where potentially dangerous machinery or working techniques are used.

As the Department deals most often with adult students, safety standards appropriate for such students would normally be observed. However, it is considered that in the case of link course students, who would generally be younger and less mature than most of the students normally dealt with by the college, a court would probably find that a greater duty of care was owed to such students.

Consequently, it is considered that a greater degree of care is required of the college when training link course students than is usually the case. If such students received only the minimum of supervision and attention, the Department would be in a weaker position to resist a claim for damages arising from any injury sustained by a student.

(f) *Insurance Matters*

It is considered that no *special* insurance policies are required with respect to students participating in link courses, unless students require insurance cover for injuries received as a result of their own negligence. Where a student suffered an injury which resulted from the negligence of an employee of either the Education Department or the Department of Further Education, the provisions of Section 27 of the Wrongs Act ensure that the Minister of Education, as the employer, must accept vicarious liability for the injury and any claims for damages arising from it. Only where an employee was guilty of serious and wilful misconduct would the Minister of Education be entitled to refuse liability.

If an employee of either Department were injured, or Government property was damaged, as a result of a negligent act of a Link Course student, the injured employee would be protected by the provisions of the State Workmens' Compensation Act and the damaged property repaired or replaced at Government expense, unless the circumstances indicated that recovery from the student was appropriate.

In order to ensure that students participating in link courses are protected in the event that they sustain an injury *as a result of their own negligence*, it is considered desirable that students should take out personal accident cover with one of the companies offering policies for this purpose.

(g) *Funding*

In South Australia there are over 2 100 secondary students from both government and independent schools involved in Link Courses. A conservative estimate of cost to the Department of Further Education Colleges, which are hosts to these students for their Link Courses, is $126 000.

In Tasmania, for fifty students the most conservative estimate of costs for providing Link Courses was $6 000 (page 26, An Evaluation of Link Courses, H. Hocking, Education Department of Tasmania, January 1978).

It is not possible to provide an accurate estimate or exact cost figure because in both South Australia and Tasmania some Lecturers for Link Courses are full-time, others are hourly paid. Some Link Courses require expensive materials others use very little material and minor equipment. Overhead expenses are very difficult to calculate. Costs of transport are met by the secondary school. However, the admittedly inaccurate estimates would be at least $60 per student per annum in South Australia, and at least $120 per student per annum in Tasmania.

In a time of decreasing budget allowances for Education by the Federal Government, the State Governments may not be able to provide funds for Link Courses, however urgent is the need for Transition Education. Obviously educational priorities need very careful evaluation.

Evaluation of Link Courses

(a) Aims and Objectives of Link Courses, of both *Awareness* and *Examination* types, should be stated explicitly and widely communicated to students, parents, school staffs, college staffs and to the public.

Awareness type Link Courses are more appropriately for students at Year 10 since they may be regarded as part of a sound general education in which vocational and liberal elements are integrated.

Examination type Link Courses are more relevant to the vocational aspirations of Year 11 and Year 12 students.

(b) People involved in evaluation of Link Courses should include:

- Secondary teachers and TAFE Lecturers who design the curriculum and teach the Link Course students
- Link Course students from secondary school
- Employers of school leavers from Link Course programmes
- Parents of Link Course students
- Link Course Co-ordinators and Administrators of Schools and TAFE Colleges involved in Link Courses
- Research and Planning Officers of the Education Department and TAFE Department.

(c) Areas to be evaluated include:

- the degree to which Link Course programmes fulfil the needs of secondary students involved, particularly the kind of knowledge and skills required, the extent of development of mature attitudes and values, and their needs for educational qualifications
- the degree to which the Link Course programmes fulfils the stated aims and objectives as perceived by students, teachers, College lecturers, parents, School Principals, College Principals, Research Officers of the Education Department and TAFE Department
- the degree to which Link Courses are jointly developed by secondary teachers and TAFE lecturers
- the degree to which the traditional school curriculum and the TAFE College transition programmes are integrated
- the breadth, depth and balance of Link Course topics
- the variety of educational and vocational experiences, both theoretical and practical, available
- the adequacy of assessment of students' progress
- the quality of career education counselling provided
- the status of the Link Courses as perceived by employers and the public who are interested.

(d) Methodology of Link Courses Evaluation:

- analyse aims and specific objectives
- translate objectives into forms which can be measured
- survey literature on evaluation studies of Link Courses
- develop an interview schedule for target groups, schools and Colleges
- select respondent groups of adequate sample size
- develop questionnaries and other appropriate evaluation instruments

- implement evaluation
- collate and analyse data
- write report and make recommendations to target groups, Schools, Colleges, Education Department and TAFE Department.

Recommendations

IT IS RECOMMENDED THAT

- Aims and objectives of Awareness Link Courses and Examination Link Courses be widely promulgated among students, teachers, parents and employers.
- After appropriate counselling of secondary students, the decision whether or not to undertake a Link Course should be made by the student.
- Adequate research be carried out to assess the real needs of secondary students for Link Courses.
- A Link Course programme be designed so that it should not narrow vocational options available to students.
- Secondary Schools and TAFE Colleges be encouraged to carry out research, joint curriculum planning and design of Link Courses at the local level.
- Secondary Schools and TAFE Colleges encourage inputs from students, parents, teachers, and employers concerning Link Course curriculum.
- A Link Course Co-Ordinator be appointed in each secondary school where Link Courses are conducted.
- The human and physical resources of schools, TAFE Colleges and industry be integrated where employers can be encouraged to be involved in Link Course development.
- Link Courses be complemented by Work Experience programmes and career counselling.
- Staff development in schools and TAFE Colleges be co-ordinated so that staff skills, talents, and expertise be integrated to provide high quality Link Courses.
- Continual monitoring and evaluation of Link Course programmes be maintained.
- Link Courses continually be developed and upgraded in status so that they can be accredited for secondary and post secondary qualifications.

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Appendix 1

LINK "TASTER" COURSES

conducted by

THE DEPARTMENT OF FURTHER EDUCATION
SOUTH AUSTRALIA, IN 1979

College and School	*Link Course Subject*	*No. of Courses*	*No. of Students*
ADELAIDE:			
School of Hairdressing	Grooming and Deportment	5	70
	Pre-Employment	3	36
PORT ADELAIDE	Office Procedures and Typing	1	30
EYRE PENINSULA	Basic Heat Engines	2	32
RIVERLAND	Introductory Accounting	2	40
	Financial Accounting	1	30
	Business Management	1	10
	Agricultural Mechanics	1	10
	Agricultural Welding	1	10
	Agricultural Construction	1	10
MARLESTON:			
School of Wool and Textiles	Wool Knowledge	2	82
	Rural Studies	1	32
	Handmade Footwear	1	6
O'HALLORAN HILL:			
School of General Studies	Introductory Accounting	1	50
	Surveying	1	50
	Art/Craft	1	50
School of Technical Studies	Carpentry/Joinery	1	50
	Automotive	1	50
	Fitting and Machining	1	50
	Electrical Fitting	1	50
	Hairdressing	1	50
PORT AUGUSTA	Automotive	1	15
	Carpentry/Joinery	1	15
	Metal Fabrication	1	15
	Business Studies	1	15
ELIZABETH:			
School of Technical Studies	Automotive	1	5
	Hairdressing	1	10
	Electrical Fitting	1	10
	Carpentry and Joinery	1	10
	Cabinetmaking	1	10
	Mechanical Engineering	1	10
CROYDON PARK:			
School of Automotive Engineering	Motor Mechanics	12	144
	Motor Body Maintenance	12	144
School of Hairdressing	Hair and Skin Care	2	52

College and School	*Link Course Subject*	*No. of Courses*	*No. of Students*
PORT PIRIE:			
School of Technical Studies	Welding	1	12
	Fitting and Machining	1	12
	Electrical Fitting	1	12
	Motor Mechanics	1	12
	Plumbing	1	12
	Hair Care	1	12
	Grooming and Deportment	1	12
	Introduction to Nursing	1	12
	Child Care	1	12
	Cookery	1	12
School of General Studies	Business Studies — Introduction to Banking	1	12
MARLESTON:			
School of Building	Cabinetmaking	1	5
	Bricklaying	1	5
	Painting and Decorating	1	5
	Floors and Tiles	1	5
	Signwriting	1	5
	Carpentry and Joinery	1	5
	Furniture Polishing	1	5
	Wood Machining	1	5
NORTHERN	Fitting and Machining	4	40
WHYALLA:			
School of Technical Studies	Automotive	1	10
	Carpentry	1	10
	Engineering	1	10
	Metal Fabrication	1	10
	Electrical	1	10
	Plumbing	1	10
	Hairdressing	1	10
School of General Studies	Business Studies	1	15
SOUTH EAST:			
School of Technical Studies	Panel Beating	2	20
	Carpentry	2	20
	Automotive	4	40
	Welding	4	40
	Hairdressing	4	40
	Grooming and Deportment	2	20
	Electrical	3	30
	Fitting and Machining	2	20
	Cooking	1	10
	Garment Construction	2	20
	Child Care	1	10
	Welding	4	40
PANORAMA:			
School of Technical Studies	Blacksmithing	1	5
	Engineering Drawing	6	63
	Fitting and Machining	8	73
	Metal Casting	2	21
	Metal Fabrication	2	23
	Welding	3	30
	Optical Mechanics	1	8

College and School	*Link Course Subject*	*No. of Courses*	*No. of Students*
REGENCY PARK:			
School of Electrical Engineering	Electrical Fitting	2	20
School of Food and Catering	Food and Wine Service	4	40
TOTAL No. COLLEGES — 15	TOTALS	157	2,143

Appendix 2

PANORAMA COMMUNITY COLLEGE OF FURTHER EDUCATION

SCHOOL OF TECHNICAL STUDIES
LINK COURSE: WELDING PROGRAMME

13 Sessions at 2 Hours

SESSION 1-3

Gas Welding

1. Equipment, safe working practice, protective clothing.
2. Setting up plant.
3. Opening and closing plant.
4. Flame settings, uses.
5. *Practice:* lighting torch, running weld beads without filler wire, butt weld 1.6 mm mild steel without filler wire, outside corner fillet without filler wire, butt weld with filler wire.
   Braze welding, brazing.

SESSION 4

Flame Cutting

1. Equipment, safe working practice, protective clothing.
2. Setting up plant.
3. Opening and closing plant.
4. Lighting blowpipe, flame settings.
5. Effects of incorrect technique.
6. *Practice:* free hand cutting straight lines and shapes, cutting holes and circles, use of cutting guides.

SESSION 5-11

Arc Welding, Manual Metal Arc

1. Safe working practice; protective clothing, electric shock.
2. Equipment; welding machines, primary, secondary and return leads, electrode holder, shields.
3. Fitting electrode to holder.
4. Meaning of open circuit voltage and arc voltage.
5. Striking arc, maintaining arc, guiding electrode along desired path and direction.
6. *Practice:* Striking arc, running beads, pad weld, butt welds, fillet welds, various types of electrodes.

SESSION 12

Arc Welding, Gas Shielded

1. *T.I.G.*: Safety precautions, equipment.
2. Setting up equipment.
3. Method of making arc (compare with manual metal method of striking arc).
4. Running beads.

SESSION 13

1. *M.I.G.*: Safety precautions, equipment.
2. Making arc.
3. Fillet welds.

Appendix 3

KILKENNY COLLEGE OF FURTHER EDUCATION

SCHOOL OF ELECTRICAL ENGINEERING
LINK COURSES FOR SECONDARY SCHOOLS

Industrial Drawing Practice

COURSE LENGTH

12 hours (6 sessions of 2 hours).

SYLLABUS

A link course for secondary students providing an introduction to the basic techniques of drawing in industry. Topics include: orthographic projection sectioning, dimensioning, sketching, pictorial views and the use of drawing standards.

The Electrical Industry

COURSE LENGTH

12 hours (6 sessions of 2 hours).

SYLLABUS

Atomic structure, static electricity, current electricity, conductors, insulators. Series and parallel circuits, measuring instruments. Polarity of plugs, sockets, fuses, circuit breakers. Safety procedures associated with small appliance maintenance and repair. Cords, leads and associated equipment. Electricity to produce heat, light and motion. Cables and installations, licensing and its requirements. Sources of electricity and reticulation. Career opportunities, industry structure, apprentice, technician and engineer.

SCHOOL OF ELECTRONIC ENGINEERING

The Electronic Industry

COURSE LENGTH

12 hours (6 sessions of 2 hours).

SYLLABUS

The principles of radio and television, Ohms Law and electronic measurements of voltage current and resistance, principles of digital electronics. Some examples of electronic devices and calculations, career opportunities, industry structure, apprentice, technician and engineer.

Appendix 4

BUSINESS LAW I

(Revised November 1976)

AIM

To provide a general background of commercial legal knowledge, including contract law and its application to common transactions.

PRE-REQUISITE

Nil.

LENGTH

45 hours.

SYLLABUS

Law of contract:

Essential elements; intention, offer and acceptance, consideration, genuine consent, capacity of parties, legality of objects. Operation and discharge; remedies for breach.

Sale of goods:

Sale of Goods Act; Consumer Transactions Act; Consumer Credit Act. Implied conditions and warranties; transfer of ownership; auctions; lay-by; consumer contracts; consumer credit contracts; consumer mortgages. Prescribed services included as consumer contracts.

Agency:

Nature of agency; capacity of principal and agent; creation of agency rights, duties and liabilities of agent; common classes of agents; termination.

Bills of Exchange:

Cheque, promissory notes and bills; description; use and legal implications; liability of parties; cheque crossings; bank/customer relationship.

201

Securities:

Main types; mortgages, bills of sale, liens, guarantees; enforcement of security.

Collection of book debts:

Obtaining judgment; enforcing judgment, including unsatisfied judgment summons, warrant of execution, bankruptcy notice and garnishee.

Insurance:

Objects: basic insurance law; terms and documents; fire, marine, accident and life insurance.

BUSINESS LAW II

(Revised November 1976)

AIM

To provide an understanding of the legal framework within which Australian business enterprises operate.

PRE-REQUISITE

Nil.

LENGTH

45 hours.

SYLLABUS

Sole Traders and Partnerships

Nature of ownership; liability; capital; business name. Formation of partnership; expansion; dissolution; profit sharing; duties of partners; partnership agreements and Partnership Act.

Companies:

Formation

Types of companies; nature of limited liability; procedure in respect of incorporation of a limited liability company; memorandum and articles of association (including Table A) powers of a company; main differences between a public, proprietary and exempt proprietary company.

Prospectus

Definition; main contents; issue and registration; shares and debentures; promoters; pre-incorporation contracts; minimum subscription.

Membership

Classes of shares; rights and liabilities of shareholders; alterations of share capital.

Directors

Appointment; powers; duties; liabilities; removal.

202

Meetings

Classes of meetings of members, procedures relating to calling of meetings and voting; including ordinary and special resolutions; agenda of annual general meeting.

Dividends

Profits available for dividends; declaration; interim and final dividends; bonus shares.

Accounts and Audit

Annual accounts and related certificates. Auditors; qualifications; appointment; auditor's report; removal of auditor.

Statutory Registers and Returns

Registers required to be maintained and returns filed, including annual return and its contents.

Receivers and Managers and Official Managers

Method of appointment; powers; duties; rights; liabilities.

Arrangements, Reconstruction, and Take-overs

Procedure involved in compromise or scheme of arrangement and any related reconstruction; effect on company, creditors and members.

Take-over offers subject to the Companies Act; main steps in take-over offer; acquisition of shares of dissenting shareholders.

Winding Up and Dissolution

Outline of procedures involved in a member's voluntary winding up, a creditor's voluntary winding up and a compulsory winding up by the Court, including the appointment of a liquidator and his powers; duties; rights and liabilities. Dissolution of companies.

Restrictive Trade Practices

Trade Practices Act; activities affected by the Act, examinable agreements and practices; monopolistic practices; resale price maintenance.

COMMUNICATION I

(Revised May 1977)

PREAMBLE

For the Business Certificate (Accounting) the communication syllabus is in two semesters named Communication I and II. The stated requirements of the course should be regarded as the minimum to be covered. The material of each semester has been designed as a logical development of concepts and skills which analyse and apply the communication process. The study of oral communication is an integral part of the course although non-examinable. The basis of this course is the progressive examination of the communication process and the presentation of all topics should be related to this objective.

AIM

To provide an understanding of the communication process through an analysis of its psychological and intellectual components and the application of this knowledge to a common method of Business Communication.

PRE-REQUISITE

Nil.

LENGTH

45 hours.

SYLLABUS

1. *The Communication Process.* 3 sessions.
   (1) The communication process presented as a dynamic interaction between people.
   (2) Examination of the integral components of the communication process: source, message, channel, receiver, feedback and barriers.
   (3) Models and their limitations.

2. *Communicator Characteristics.* 5 sessions.
   (1) Psychological aspects.
      (a) Perception: the limitations of an individual's interpretation of received sensory data. Psychological, physiological and environmental influences on perception.
      (b) Motivation: physiological and psychological/social needs.
      (c) Self-concept: the formation of self-concept. The effect of positive and negative self-concept on the communication process.
      (d) Attitudes: development of attitudes and their modification.
   (2) Reasoning Processes.
      Observations, judgments: inductive and deductive reasoning.

3. *Reasoning Applications.* 3 sessions.
   (1) The construction and presentation of a persuasive argument.
   (2) Critical evaluation of arguments including identification of fallacies and weaknesses of reasoning and construction.

4. *Message.* 1 session.
   (1) The establishment of objectives and receiver response.
   (2) Design and development of effective and efficient communication messages through appropriate and correct English expression.
   (3) Empathy as a factor in message construction.

5. *Data Research and Analysis.* 1 session.
   (1) Library research.
   (2) The uses and limitations of questionnaires
      interviews
      surveys
   (3) Acknowledgement of sources: bibliography and footnotes.

6. *Reports.* 2 sessions.

Employment of reasoning application, examination of the message and use of data research and analysis to provide the structured, formal report. The report to include: preliminaries (can include title page, contents, letter of transmittal), introductory element, body of report, concluding element, supplements (appendices, bibliography and summaries may be included).

Notation systems and sub-paragraphing.

Memo reports.

Note:— The syllabus suggests the number of sessions which should be devoted to each topic. This is to be taken as an indication of the depth of study required and is not meant as a prescriptive instruction to lecturers, nor to indicate the weighting which the topics may have in examination.

COMMUNICATION II

(Revised May 1977 — for implementation in and from Semester I, 1978)

AIM

To analyse the function of methods of communication in business and to improve the students' skill in using communication techniques common to business practice.

PRE-REQUISITE

Communication I.

LENGTH:

45 hours.

SYLLABUS

1. *Revision* of basic concepts of Communication I. 1 session.
2. *Channel.* 1 session.

   Evaluation and selection of channels.
   Verbal (oral and written) and non-verbal (aural and visual).
3. *Correspondence.* 4 sessions.

   (1) Internal: memoranda.

   (2) External: letters.

   For both internal and external correspondence these factors should be considered.

   (a) The establishment of objectives and the determination of receiver response.

   (b) Reconciliation of style and tone of correspondence to writer's objectives.

   (c) Form correspondence and specific purpose letters.

   (d) Presentation and layout.

4. *Oral Communication.* 3 sessions.

Analysis of oral communication process and techniques using a communication model.

(1) Person-to-person, e.g. interviewing skills.

(2) Person-to-group, e.g. technique of presenting a short speech.

Listening.

5. *Technological Media.* 1 session.

Effective use of telephones, telex, dictation machines, intercommunication systems.

6. *Meeting Procedures.* 1 session

(1) Preparation of minutes of meetings agenda.

(2) Conduct of meetings.

7. *Precis Writing:* of reports, discussions, interviews. 1 session.

8. *Communication in Organizations.* 3 sessions.

(1) The individual in groups in an organization.

(2) Communication Networks. Different kinds of networks and their communicating effectiveness, e.g. formal/informal alternatives.

Note:— The syllabus suggests the number of sessions which should be devoted to each topic. This is to be taken as an indication of the depth of study required and is not meant as a prescriptive instruction to lectures, nor to indicate the weighting which the topics may have in examination.

CAREER EDUCATION: WHAT DOES IT MEAN IN AUSTRALIA?

C. J. MORGAN

"Work" is the purposive activity of an individual and includes paid employment, full-time home-making, leisure-time projects and student learning.

"Career" is the totality of work done in a person's lifetime.

"Career education" is the sum of the activities and experiences provided by the school through which one learns about and prepares oneself for work.

A.C.T. Schools Authority 'Career education policy' statement (79/271).
24 May 1979.

On a cold May evening in 1979 I looked around at the 20 or so faces belonging to members of the Australian Capital Territory's small 40-member Career Education Association (some of whom had been present five years earlier when, after two years of preparatory moves, the association was finally established) and pondered again the tenacity of purpose that has kept together these changing faces from History, Mathematics, Industrial Arts, Social Sciences, from government and private schools, from tertiary institutions and government departments. We were meeting for the first time in the soon to be opened Career Reference Centre, for which we had been lobbying since 1975, and we were to listen to our ex-Secretary, now Careers Liaison Officer with the Schools Authority, the official body administering government schools in the Territory, reading the Authority's 'Career education policy' statement. Among other things the policy statement asks schools to 'consider the extent to which they:

(a) identify staff to implement the school career education policy . . . ;

(b) offer in-service opportunities to bring staff up to date on specific career education topics . . . ;

(c) allow staff to attend systemic and other in-service courses on career education;

(d) make allocation of time and money for staff initiated projects in career education;

(e) establish links with parents, employers, trade unions and post school institutions;

(f) provide suitable facilities for a careers reference centre in the school;

(g) evaluate the effectiveness of career education in the school and rationalise the education program currently operating in the school to incorporate/increase a career education component;

(h) encourage students to obtain work experience during time free from school activity.

For all members, but particularly for those who had attended the early meetings in 1974, the combination of meeting place and policy statement might have been regarded as an occasion for high and solemn celebration. Somehow

the opportunity was not seized. The Territory's first careers market was to take place the following week; the association needed to make a statement on year 10 certification; there was a possible in-service conference to be discussed . . . and the time slipped away. So may the Victorian Education (Work Experience) Act 1974, the New South Wales ministerial letter to school principals on 'the role of the careers adviser' (2 February 1976), the 'Draft policy: careers education' statement by the New South Wales Teachers' Federation (1976) and the inauguration of the South Australian Career Education Project (1976) have been reported without ceremonial feasting. What has been happening in schools around Australia to draw such support from the educational bureaucracy, and what has happened as a result of that support?

The Beginnings of Career Education in Australia

Many see the roots of career education stretching back to the 1920s through the vocational guidance movement, and there is much that takes place in career education that has also taken place in vocational guidance for many years. Activities such as individual interviewing, occupational visits, career nights and curriculum programs in various combinations have been common to both. The changes that have taken place have been changes in the attitudes of teachers given the responsibility for careers work in schools and the steady growth of government commitment to preparing students to face their uncertain future whilst still in the comparative haven of home and school.

Vocational guidance offered to students by teachers in schools has for the most part been a haphazard affair — a brief personal interview with a teacher having access to the results of vocational test batteries and career guidance pamphlets. For sophisticated vocational guidance he or she has had to seek the professional within government departments or pay for the services of a consultant vocational psychologist. Professor W. M. O'Neill, who had partial responsibility for introducing careers advisers into New South Wales schools in 1940 has recently written that their appointment can be seen 'not merely as a negative failure, but as a positive menace':

> School teachers selected more or less at random as careers advisers prove to be more naive than trained psychologists appointed as full-time psychologically trained vocational guidance officers; they know less about the interpretation of test results and have less time to find out about vocations and their demands. (O'Neill 1976:7.)

Whilst the selection of teachers for careers work may still be a random affair (it remains the prerogative of the School Principal to select and deploy his or her staff as he or she sees fit), the formation of career education associations in which teachers engaged in careers work easily outnumber other members, suggests that teacher commitment has greatly changed. At the same time the introduction by teachers of instructional programs which in the majority of cases they have themselves devised suggests that teachers may have learned to distinguish their own role in the co-operative provision of total guidance services and are meeting Richardson's plea that they should 'do what they are uniquely placed to do' and teach (see Richardson 1976:8).

It is this involvement of school careers personnel in teaching career education programs, in the construction of which they have been intimately involved, that has been the phenomenon of the 1970s and that has most clearly distinguished career education from vocational guidance.

However, none of this would have been possible in Australia without the progress of a similar overseas commitment which produced both the theoretical framework and the material resources needed by Australian teachers to inaugurate their own career education movement. There is little point in trying to argue whether changes in attitude towards and knowledge about career preparation were first promulgated by teachers, government research officers or academics; the fact is that career preparation has always needed the active co-operation of teachers and government agencies and depended upon the clarity and persuasiveness of academic texts. The provision of vocational information was written into the Victorian social science syllabus as early as 1955 and the first full length Australian guidance program with a large segment devoted to vocational preparation was foreshadowed in the New South Wales ministerial statement following the Wyndham Report of 1957. However, the latter was cordially disliked by many teachers who had been given insufficient time to implement it and insufficient training to understand it. The time was not ripe for co-operation. Even when rewritten in 1971 it failed to appeal to those New South Wales teachers who were expected to fit their guidance into roll call periods or to careers advisers whose minimal time allowance for careers advising was already taken up with personal interviewing.

The first mutterings of a need for increased career information, greater allocation of time for careers advising and better preparation of careers advisers could be heard in educational reports of the late 1960s and early 1970s (see the Western Australian Dettman Report of 1969, Karmel Report from South Australia in 1971 and A.C.T. Campbell Report of 1973). At the same time Richard Campbell was exploding the popular myth of the 'typical Australian who could work like a demon when he had to, but . . . knew when to stop, work, like the boss . . . not (being meant) to be taken seriously and preferably (to) be avoided' (Campbell 1968:29) and the occasional careers adviser was making public complaints about the lack of adequate career preparation, particularly for early school leavers (see Poulton 1970). Academics were also undertaking research which was to provide ample evidence of students' ill preparedness to face new patterns of living away from home and school and their demand 'that there should be more subjects that are useful in a job' (see Anderson in Harman and Selby-Smith 1973:21-22; see also Tinney *et al.* 1974, Connell *et al.* 1975 and Poole and Simkin 1976).

Whilst the occasional school chose to write its own guidance program in order to bring personal and vocational development and a greater understanding of the world of work into the classroom (see Crawford *et al.* 1973) it was the coming together of disgruntled teachers in career education associations in the mid-1970s which provided the launching pad for career education through the pooling of problems, the discussion of new ideas and the tentative use of materials and models which had already been developed overseas.

209

To the United States for Theory and the Integrated 'Work' Oriented Program

(a) *Theory*

The 1950s and 1960s were exciting and fruitful years for vocational psychology in the United States. Maslow was perfecting his theory of motivation based upon the continuing emergence of higher level needs and his theory was adopted by vocational psychologist Anne Roe in 1954 in her analysis of occupations and by Frederick Herzberg to illustrate worker motivation and work satisfaction. These theories held considerable appeal both for vocational counsellors who wished to see occupations meeting their clients' 'safety', 'security' or 'esteem' needs and those who wished to talk in more general terms about jobs that would provide 'worker satisfaction'.

John Holland was also developing his sophisticated version of Frank Parsons' advice given to vocational counsellors in 1909. To choose a vocation, Parsons had written just before he died, you need:

(1) A clear understanding of yourself, your aptitudes, abilities, ambitions, resources, limitations and their causes;

(2) A knowledge of the requirements and conditions of success, advantages, compensations, opportunities and prospects in different lines of work;

(3) The reasoning on the relations of these two groups of facts.

(Parsons 1909:5.)

Holland's revision of this 'trait and factor' theory, which analyses occupations in terms of the personalities of the people who engage in them, and matches people with those occupations that have proved to be rewarding and satisfying to people with similar personality traits, continued (and still continues) to appeal to vocational counsellors as a sensible and straightforward way of looking at vocational guidance, despite its rather heavy reliance upon tests to establish personal similarities and differences and its encouragement of a static approach to decision making.

Other researchers, still basically concerned with personality and career choice, were turning their attention to the more dynamic aspects of vocation — its gradual development alongside physical, social and emotional maturation, and the process leading up to career decision making. In 1951 Ginzberg and his colleagues at Columbia Teachers' College identified three clearly marked stages in vocational development moving from childish fantasy to realistic 'exploration', 'crystallisation' and 'specification' (see Ginzberg *et al.* 1951). Donald Super, who had been writing in the field since the 1930s, suggested in an article published in the same year that although physical and psychological inheritance might set limitations on the emerging occupational self-concept a sizable proportion might be shaped by social and economic conditions and thus be amenable to outside intervention (see Super 1951). In 1953 Super extended his colleagues' developmental stages to correspond with five life stages, 'growth', 'exploration', 'establishment', maintenance' and 'decline' (see Super 1953). Pursuing similar lines David Tiedemann, among others, looked more closely at stages of occupational decision making, from disorganised thinking to crystallisation of judgment, preliminary choice, 'clarification', 'induction' and 'integration' (see Tiedemann and O'Hara 1963).

These researches provided a picture of career maturation from cradle to grave and gave to the word 'career' dimensions far beyond those of occupational security and status; it had now become almost synonomous with life itself, embracing all the images of work from the small child's play-acting of adult work roles to the channelling of the work potential of the aged into rewarding leisure pursuits. Clearly illustrative of the new dimensions was the phrase 'career path' or 'career trajectory' which suggested that life was still a 'career' even if one was presently unemployed or travelling horizontally from department to department or job to job without climbing any promotional ladders.

Super had stated as proposition seven of the ten propositions contained in his 'theory of vocational development' that 'Development through life stages can be guided partly by facilitating the process of maturation of abilities and interests and partly by aiding in reality testing in the development of the self-concept' (Super 1953:189) and plainly the potential for educational intervention in the student's formation of a career self concept, given his broad definition of career (later to be broadened still further) was enormous.

It offered primary school teachers a chance to undo some of the damage done by media and familial sex-role stereotyping in the minds of five year olds; it suggested, without making a song and dance about it, that students leaving school at fifteen to take up employment might still be taught to think in terms of social acceptability and social mobility — might be persuaded in fact that their occupations still had social meaning. It suggested that there might be sound sense in thinking not just about one possibly unattainable goal (whether it be a particular occupation or a university education), but about serial goals, related occupations and skills of adaptability that need not necessarily be related to academic prowess. Its roots in the physical, mental and emotional maturation processes suggested different curriculum content for different school age groups and opened the way to a re-emphasis on the continuing demand of employers for basic skills and 'good' study habits.

The bringing of the notion of 'career' within the orbit of the least academic of students was particularly fortuitous in the United States, enabling the linking of 'career' and 'education' in a pragmatic fashion during a period when growing unemployment among young people was causing distress in the minds of educationists similar to that facing education departments in Australia today.

(b) *The integrated 'work' oriented program*

Part D of the 1968 Vocational Education Amendments Act which provided the funds for pilot career education programs at elementary and secondary level across the country made no bones about the primary purpose of such financial assistance:

> Section 141. The Congress finds that it is necessary to reduce the continuing seriously high level of youth unemployment by developing means for giving the same kind of attention as is now given to the college preparation needs of those young persons who go on to college, to the job preparation needs of the two out of three young

211

persons who end their education at or before completion of the secondary level, too many of whom face long and bitter months of job hunting or marginal work after leaving school. The purposes of this part, therefore, are to stimulate through Federal financial support, new ways to create a bridge between school and earning a living for young people, who are still in school, who have left school . . . or who are in postsecondary programs of vocational preparation, and to promote co-operation betwen public education and manpower agencies.

A further section spelled out the 'uses of funds'. The three uses particularly relevant to teachers were:

(A) those designed to familiarise elementary and secondary school students with the broad range of occupations for which special skills are required and the requisites for careers in such occupations;

(B) programs or projects for students providing educational experiences through work during the school year or in the summer;

(C) programs or projects for intensive occupational guidance and counselling during the last years of school and for initial job placement.

I have quoted these extracts in full because they seem to spell out in no uncertain terms the major aim of the career education movement in the United States in its formative years. American youth was getting careless in its attitudes towards work. Whilst 'work' was becoming a dreary four letter word signifying drudgery to too many young people, their mentors (parents and teachers alike) seemed interested only in their striving for a college education at a time when business and industry were looking for more adaptability rather than simply more education.

Whilst Section C could be safely left to the school counsellor, firmly established in the school system by the end of the 1960s, Section A would need the co-operation of every classroom teacher since it was to begin at kindergarten level and continue to grade 12 and beyond. At every level teachers were to relate their lessons to the outside world and show their students that 'work' was the one thing above all others that was going to continue to give meaning to their lives, that work was good, and that it required effort before it would yield rewards.

In the majority of exemplary programs the integrated 'work' oriented model stressed the study of work roles among communities in the elementary school, assisted by such texts as Senesh's *Our working world* and kits such as Dinkmeyer and others' *Duso D-2* (which incorporates 'career awareness activities'). At high school level students were to study occupational clusters and acquire 'saleable vocational skills' in English and mathematics, social science and so on; career role playing and occupational visits at elementary level were to be enlarged by work experience at senior level.

To Britain For Separate Career Education Programs and the 'Life Skills' Model

In Britain career education was in no way related to vocational education. The suggestion of selectivity, streaming and pre-entry vocational training which can so easily be magnified in the American approach to career education (the early discovery and fostering of skills and aptitudes, the exposure

to work experience) appears to have been anathema to the British from the beginning.

This may be attributed partly to the long haul out of the disaster of secondary modern education versus grammar school education in the 1950s, and partly to a youth employment (now careers) service which even in the 1960s when it was being heavily criticised, easily surpassed that of many other countries, including Australia, in the attention paid to school students.

Career education was introduced into Britain as part of a guidance package which might best be described as 'social education'. The building of pyramidal guidance structures, with careers advisers and other subject teachers working under the supervision of a Head of Guidance reflected the acceptance by the educational establishment of a number of government reports, all of which reiterated the desire of students to be accepted into the wider community as potential adults rather than perpetual children. The heavily subsidised Schools Council careers and guidance project began in the early 1970s made it clear that it had areas of common concern with other moral education and humanities projects, and in fact followed the production of a new humanities project, often used in Australian schools, one segment of which was entitled *People and work*. When the National Association of Careers Teachers (formed in 1969) decided to amalgamate with guidance staff in 1973 the decision was said to 'reflect the growth in the extent and variety of the guidance work undertaken in schools and other educational institutions', and in its policy document on guidance issued a year later it stated its concern for the 'whole person and therefore with educational and vocational development' (see *The Careers and Guidance Teacher*, Spring 1976:14). Since there were already teachers holding responsibility for careers advising in secondary schools there was a greater impetus to provide separate career education programs which became part of the secondary school curriculum. Primary schools were little affected by the movement.

The British career education programs included in Hayes and Hopson's *Careers guidance* (1971) ranged from a fourth year syllabus involving career analysis, occupational visits, the completion of ability tests and interests inventories and career role playing, to a fourth year syllabus which included the topics 'understanding today's world', 'becoming an adult', 'living with others', 'home-making and health', 'taking responsibility — good management, budgeting (and) competence in everyday "business" situations', 'making the transition to work — careers, self-assessment and self-adjustment; duty and privileges' and 'enjoying leisure'. Similarly broad 'life skill' topics were suggested in Howden and Dowson's *Practical guidance in schools* (1973), including 'communities', 'communications and co-operation with others', 'physical and emotional growth' and 'health education' as well as job analysis, and an investigation of further education and training.

To the Local Australian Scene for 'Work and Leisure' and 'Survival' Programs

Australia has thus had two very clear and divergent overseas models from which to choose — a model which concentrates heavily upon directing the attention of students from an early age towards good work habits, wide

knowledge of occupations, acceptance of work as a realistic and worthwhile goal, and the pursuit of those skills which will be most useful in a work context; and a model directed mainly at self understanding and maturation, with an in-set module concentrating upon career skills (ranging from an understanding of life-styles to the more pragmatic filling out of application forms) directed mainly at the fourteen to sixteen year old age group.

Two further models are Australian hybrids, one the result of developments in the social sciences over the past decade, the other a response to the much more immediate problems of unemployment.

(a) *'Work and leisure' programs*

Calls for school subjects to be made more relevant to life have nowhere fallen on more fertile ground than in the social sciences, and it is to their credit that, despite continuing and for the most part successful attempts to lose an image of febrile trendiness and unscholarly ransacking of 'problem' areas, the social sciences have maintained a lively interest in man's two major pre-occuptions, work and leisure.

The interest of sociologists in work has been quite as long-standing and productive as that of psychologists, and has revealed preoccupations that have on occasion proved disturbing to vocational counsellors. Attention has been drawn to the many socio-economic variables that modify and inhibit both career choice and access to education and training. Studies of American cities in the thirties and forties by Helen and Robert Lynd, and Warner, Hollingshead and their associates, all drew attention to social inequalities and the work of occupational sociologists of the 1950s and 1960s, Blau and Duncan and Theodore Caplow in the United States and M. P. Carter in Britain, have all reinforced what might be regarded as the negative side of occupational decision making. Indeed, in a fairly recent article Kenneth Roberts queried the usefulness of career guidance, which he claimed did little more than 'lubricate more basic processes of occupational selection' (Roberts 1974:6). American writers, such as G. Straus (1963) and Dubin and Goldman (1972) have questioned the assumption that work is a central life interest, whilst Bryson has cited research pointing to a growing trend for career decisions to be subordinated to family and leisure interests (Bryson in Dawson (ed) 1974).

Leisure has also been the subject of sociological analysis in both the United States and Britain (see Neumayer and Neumayer 1958, Brightbill 1963, Roberts 1970, Johannes and Bull (eds) 1974, Kando 1975, Parker 1976), and programs for high school students involving a study of work and/or leisure have become a part of several social science courses (see New South Wales Department of Education 1975, Morgan 1977, Elliott 1975, Bridgewater High School, Hobart 1978). These courses do not present career education in anything like the personal and developmental framework of the other two models; their interest is more wide ranging and descriptive — often for instance involving comparison between different countries — but all have the underpinning of direct student-related experience regarded as an essential basis in all social science units.

(b) *'Survival programs'*

The final model, that of personal survival is too recent a phenomenon to be described with any precision. It appears to be an amalgam of vocational skills training and personal and social development, and is a very direct response to the threat of continuing and recurrent unemployment. Social development has been strongly represented in social science syllabuses from kindergarten upwards and has been strengthened in Australia by the materials produced by the Social Education Materials Project (SEMP). Personal development has been represented in human biology courses and more recently in courses bearing the title 'Personal development' supported in reports such as the Evatt Report on human relationships, and a series of personal development booklets published in Australia. Survival programs appear to owe something to these programs but only in so far as they relate to coping skills (for example how to cope with sexual or personal problems whilst also trying to cope with life on the dole, how to budget on a reduced income, how to communicate with the bureaucracy). The survival model differs from the 'life skills' model in its extremely practical non-theoretical bias and its preoccupation with the provision of work and leisure 'skills' that may make students into more attractive employment prospects and, during periods of enforced unemployment, enable them to employ themselves in 'productive' leisure activities (that is 'productive' in its widest sense of keeping up morale and a sense of dignity and self worth, whether its products are saleable or not).

Australian Career Education Practitioners and Their Choice of Program

Although careers work in Australian schools is mainly undertaken by practising teachers with other teaching duties it is not invariably the case. A large number of schools in Victoria and a growing number in New South Wales now employ the services of a full-time careers teacher who, like any other full-time teacher is a permanent member of the staff. In the past the engagement of a full-time peripatetic careers and guidance teacher has been a common feature of the Catholic education system and has been recently suggested for government high schools in the Northern Territory. Full-time professionally trained psychologists have held a similar roving commission in many Queensland and Western Australian schools. In the latter state Youth officers have also been attached to a number of schools to help facilitate the transition from school to work and their appointment was recommended in the 1978 report of the Tasmanian Career Education Working Party (see Tasmania Department of Education 1978).

Careers work involving isolated students is undertaken in New South Wales by the Correspondence School and involves a detailed career education correspondence program. In South Australia Student Counsellors who were part-time teachers were appointed to 17 schools on a trial basis in 1976 with responsibility for educational, personal and vocational counselling, and in 1977 there was one such counsellor in every government high school of 500 pupils and two or more for larger schools (see Blakers 1978:190).

Any attempt to properly describe the careers work undertaken by this wide range of personnel is further confused by the varying amount of time

allocated to careers work by individual schools and the varied interpretation of the work itself. Thus some full-time careers teachers still elected to teach a minimum number of periods of their original subject of training, partly to 'keep their hand in' as it were (for new areas of educational commitment do not have any guaranteed longevity) and partly to keep in contact with 'regular' teachers who might otherwise view them with suspicion. Where career education is integrated throughout the school curriculum full-time careers teachers may not be involved in teaching, but in co-ordinating, persuading and organising as well as continuing in the old vocational guidance tasks of personally advising students and ensuring an adequate provision of careers literature. A restricted version of this role may also be played by the careers adviser who is allocated anything from three to twelve teaching periods per week free from other teaching duties. Other teachers may choose to use a much greater proportion of their time allowance in face to face careers teaching, and some will offer a separate career education program that may begin and finish anywhere along a continuum stretching from year 7 to year 12. In some schools such programs are offered as an elective unit; in some they are compulsory, and the nature of the careers work will differ not only between state and state, but within each state according to the extent of the freedom given to each school principal by his or her governing authority to allocate staff and control time-tabling.

A further quotation from the recent career education policy statement by the A.C.T. Schools Authority may perhaps help to clarify the delicate position of any such governing body.

> *Possible* staffing arrangements include:
>
> - a full-time career co-ordinator
> - a team of interested staff with various duties
> - a career education course teacher
> - a community liaison officer.
>
> In the secondary colleges the emphasis in career education will vary from that in the high schools. In the former there will be more emphasis on individual counselling which needs to be closely linked with course counselling. With the wider range of courses it is likely that fewer students will choose career education as a subject. Career education *may be most effective* if offered as a single unit which can be fitted into other sequences rather than as a series of units. In high schools career education *might be most effective* as a compulsory course for years 9 and/or 10 or as the major emphasis in a living skills programme.
>
> (A.C.T. Schools Authority 1979:2-3; emphasis added).

Even the above diplomatic hedging and wary use of alternatives failed to avert an immediate outcry from some principals who felt that the autonomy of individual schools was being threatened.

Without wishing to appear too dogmatic it would seem that New South Wales and A.C.T. careers advisers have tended to favour separate career education programs, and Victoria and South Australia integrated programs, but whether this has been due to a considered choice between career concepts as ideas most suited to integration and career education as a fully developed subject in its own right is difficult to determine; it may have been that the choice in each case was a fortuitous one; New South Wales already happened to have careers advisers with at least nominal time-tabling; the other states did not. Program content ranges along a continuum stretching from the exploration of occupations and development of career awareness and career decision making skills to life skills courses that include legal studies, a study of family and marriage, health and driver education. Again it may well be that 'life skills' are more easily fitted into integrated programs, but they have also been included in separate programs although usually with a recommendation in favour of team teaching (see Glover 1978). Lest this picture of careers work should too much resemble a shaken kaleidoscope let me hasten to add that an attempt by the author to detail the teaching of social science courses around Australia earlier in the year produced almost as chaotic a portrait, in terms of content, although time allocation was a little more regularised, and I suspect that many traditional subjects might reveal the same rugged individualism that appears to have rather shocked the recent panel of OECD observers sent to observe the country's educational practices.

Early Career Education Resources

Not only were the American and British models there for the choosing in the early 1970s, overseas resources were also entering Australia and the other valuable half of the career preparation team, the personnel in government departments of education and industry had not been idle.

Hobsons Press, which since the mid-1960s had been publishing materials produced by the Careers Research and Advisory Centre (CRAC) in Cambridge, England, set up a modest office in Sydney in the early 1970s and later opened an office in Melbourne. Its managing director, Ian Stuart, spent much time travelling interstate and talking to career education associations and careers personnel in government departments. From this on-the-doorstep source interested careers advisers could purchase practical suggestions for careers work, the most important being Hopson and Hough's 1973 *Exercises in personal and career development*, and Avent's 1974 *Practical approaches to careers education*.

At the same time Dr Keith Underwood, who in 1965 had published *Some trends in vocational development research*, a survey of American career development theory, had been busy with Australian research into the vocational development of New South Wales sixth formers. This had led him to develop a *Career Orientation Programme* (COP) which was first tested on New South Wales country students attending the New South Wales government's vocational orientation camp at Narabeen Lakes in 1973. Owing much to the American effective problem-solving technique developed by T. M. Magoon, the program, intended to aid vocational decision making,

was further valuated by Betty Levy of the Victorian Department of Education in 1974, after being run in a Victorian high school. During the following year it was adapted by the Commonwealth Department of Labor and Immigration (now Employment and Youth Affairs) as a series of pilot programs to be tested by fourth form students. 1975 also saw the publication of Dr Underwood's *Abstracts of career guidance resource materials*, which comprised 20 abstracts of British and American unit materials 'appropriate in different ways to the vocational needs of those in the exploratory stage of vocational development', giving a description of the materials, the time required for their use, and general comments, together with the source for purchase. Following testing and evaluation of responses to a user questionnaire, the renamed Department of Employment and Industrial Relations, produced a revised version of its *Career planning pack* for distribution to schools across Australia in 1976.

Early Developments In Australian Career Education: 1974-1976

The career education associations formed in the A.C.T., Victoria and New South Wales in the mid-1970s were avid consumers of the information released from all of these sources, as well as of numerous fully fledged career education programs from the United States which were made available to interested persons in all States, largely due to the efforts of Bill Mulqueen, a careers teacher appointed to the position of A.C.T. Careers Liaison Officer by the Interim Schools Authority in 1974. In the same year two teacher training courses in career education were inaugurated in Victoria, one a pre-service elective unit for trainee teachers at State College of Victoria — Rusden, and the other a post-graduate diploma at the Royal Melbourne Institute of Technology.

In the same year the Victorian government passed its Education (Work Experience) Act, subtitled 'An Act to enable pupils of schools to obtain work experience as part of their education'. Work experience had been engaged in for vocational purposes in many technical high schools for some years, but its introduction as part of general education has for the most part taken place in the 1970s. By 1974 it had been introduced into a considerable number of both government and non-government schools in Victoria and other states (see Blakers 1978: part III, Morgan and Hart 1977: ch 5).

In 1975 eleven Victorian teachers were chosen to implement career education programs in high schools in that state, the majority electing to continue to teach a minimum number of periods in the subject for which they had originally trained. These teachers initiated programs which they had devised themselves during in-service training (see Banyule High School program in Blakers 1977: 157 ff and descriptions of programs operating during 1975 at Banyule, Morwell, Newborough and North Geelong in Morgan and Hart 1977:28-29). Watson High Schol in the A.C.T. also offered its first career education course to students in that year, and the A.C.T. Career Education Association invited Dr Underwood to address a seminar on the possibility of introducing career education programs into A.C.T. senior secondary colleges to be opened the following year.

In South Australia a Youth Work Unit was set up in 1976, following the recommendation of a youth unemployment working party. Short term finance was made available for projects initiated by the Department of Education, Further Education and Community Welfare. The Department of Education contributed a Career Education Project, which produced a pilot career education program tested in selected South Australian schools later in the same year (see Blakers 1978: 194 ff).

In the same year in New South Wales, Angela Glover from Gosford's Henry Kendall High School, with support from the Career Education Association of New South Wales, began to lobby the New South Wales Department of Education to accept her report. *Some Proposals for the Advancement of Careers Education* (SPACE), which demanded improved time, facilities, status and training for careers advisers, and described the career education program which she had been running at her own school during that year. 1976 was to prove as important a year for New South Wales as 1974 had been for Victoria. On 2 February, A. J. Buchan, Director of Secondary Education, sent a circular letter to all school principals, pointing out the need for greater time and facilities for careers advisers to implement the new 'developmental approach' to career preparation. On 29 September the New South Wales Teachers' Federation released its 'Draft policy' on career education, offering a nine item list of minimum physical facilities for adequate career advising, and supporting the introduction of career education courses. More importantly it promised 'to seek to produce more complete policies on full-time careers advisers, tertiary training and guaranteed tenure and full professional rights, physical resources and career education methods' 'New South Wales Teachers Federation 1976:333), a promise that it was to keep in its submission to the Williams Committee on Education and Training in the following year (see New South Wales Teachers Federation 1977).

An experimental career education program was also tested in Western Australia in 1976, and career education programs were introduced into several more A.C.T. schools and two of the senior secondary colleges (see Morgan and Hart 1977:28, 37-39). By the end of 1976 work experience programs had become a feature of many more schools, although these were not always part of a more comprehensive career education program, and career education programs were being written for disadvantaged students (see programs for Aboriginal students and slow learners and girls in Morgan and Hart 1977). By the time the Prime Minister announced the establishment of a Committee of Inquiry into Education and Training on 9 September 1976 the first full length book entitled *Career education in Australia*, was ready to go to press (see Morgan and Hart 1977).

Recent Developments In Australian Career Education: 1977-79

(a) *Professional associations*

Lack of funds, mis-timing and interstate rivalries have so far combined to stifle moves to form a National Career Education Association, but the first National Career Education Conference, funded by the Curriculum Development Centre was held in Canberra in May 1977 and attracted career education enthusiasts from all states and the Northern Territory despite a strike of air

traffic controllers beginning only 48 hours before the start of the conference which prevented the attendance of a number of interstate delegates and grounded the overseas speaker in Singapore. The conference produced a lengthy report (see Hart 1977) and a submission to the Curriculum Development Centre recommending the co-ordination of career education at a national level, defining career education for curriculum purposes and commenting upon community involvement, and development of curriculum, information needs and the 'establishment of a clear role for the careers teacher' (see Career Education Association of the A.C.T. 1977). Later in the same year the Queensland Career Education Association was formed, and the inaugural meeting of the Career Education Association of South Australia was held on 19 September 1977 (see *Career Education Project Newsletter*, September 1977:24).

(b) *Resources*

Over the past two years career education resources have multiplied across the nation. Queensland has been particularly active in three areas: the production of both book and non-book resources for school leavers (see *Apprenticeships, Building a house; Year 10 Crossroads; (Year 12) Your next move. Think on it.* and *Joining the work force.*); the investigation of a storage and retrieval system to integrate career education material into a school library collection; and the production of special career education materials for Aboriginal students(see Inala Family Education Centre, *Making it*). The Queensland Career Education Association is also this year (1979) piloting a professionally produced career education newspaper, funded under a grant from the Australian Schools Commission.

South Australia, with funds under its Career Education Project grant has produced a wealth of resource material, owing much to the imagination of J. B. Flaherty, including two simulation games (see Flaherty 1978, *Ritestaff* and *T.A.G.*) It has produced a *Teachers' guide to career education in the junior secondary school* (1977) and a 248 page report on *Programs and developments in career education in South Australia* (1978). It has also, through its Department of Further Education, produced reports describing the state's link courses (see *Curriculum co-operation* (1977) and *A description of link course programs in South Australia* (1977)).

New South Wales has published through its Education Department two bibliographies of career education materials (see Morgan 1977), Squires 1978), a program for Correspondence School students (see New South Wales Correspondence School 1977), the *Living skills* program run by Angela Gosford at Henry Kendall High School, Gosford (1978), and Underwood's *Career Planning activities for the junior high school* (1977). The Education Department and the Department of Labour and Industry also hold a number of unpublished career education programs and resources, including the *'Career Orientation Guide* (C.O.G.) and SPAN programs produced by Judy Jones of the Department of Labour and Industry, career education programs for country students, produced by Emmaville and Woodenbong central schools, and a program for early school leavers by Cowra High School.

During 1978 the Victorian Department of Education produced *Learning Activity Packages* (L.A.P.S.) compiled by L. Unsworth, *Practical exercises for career education programmes* and a collection of career education pro-

grams from Morwell, Banyule, and Albert Park schools entitled *Career education, what is it? Why is it needed? Integrating it into the curriculum.* The Tasmanian Education Department has joined New South Wales, Victoria, Queensland and Western Australia in producing a guide for Queensland and Western Australia in producing a guide for introducing work experience into schools, together with a report *Careers education: a summary of approaches in Tasmanian schools and colleges*, produced in April 1978. Western Australia has recently completed a survey into 'Attitudes of employers to school leavers in Western Australia', a joint project undertaken by the Education Department and the University of Western Australia (see Williams and Priest 1978. K. F. Mader, a South Australian Career Education Officer has also produced a report of *Employer perceptions of school leaver performance 1971-1976*. A survey of 92 employers who had employed one or more school leavers from Glossop High School. This latter resource was compiled with the express purpose of assisting in the development of the school's career education program, and an appendix offers 'a condensed course of six lessons compiled from the comments (and) ideas given (to Mader) during interviews with 90 employers' (see Mader 1976: Appendix E).

Two other recent resources have been of considerable importance to careers teachers: the production of newsletters and career education journals by career education associations and government departments, and the production by the Division of Postgraduate Extension Studies of the University of New South Wales of a training kit for careers teachers.

Besides the Queensland newspaper referred to earlier, the Career Education Association of Victoria also produces a very stylish and quite lengthy journal carrying reports of all major meetings and seminars, news of resource items and publicity for future meetings. Communication between government departments and careers teachers is facilitated by the following newsletters (given in alphabetical order): *Careers Advisers Bulletin* (NSW Department of Education); *The Careers Advisers Newsletter* (NSW Department of Labour and Industry); *Career Education Bulletin* (A.C.T. Schools Authority); *Careers Education Bulletin* (Tasmania Department of Education); *Career Education Project Newsletter* (S.A. Department of Education); *Joblots* (Victorian Department of Education); *Secondary Information Bulletin* (Queensland Department of Education, limited circulation to guidance officers); and *South Coast Careers News* (NSW Department of Education).

The University of New South Wales training kit for teachers, entitled *The careers adviser in the secondary school*, comprises a series of seven lectures, recorded on audio cassette from university radio broadcasts, and accompanied by lecture notes. The series was produced by Dr Underwood, who also takes part in the lectures. Other lecturers included Barbara Doig, Chief Guidance Officer, Margaret Gambley, Senior Guidance Officer, and Jo Howard, Guidance Officer, all with the New South Wales Department of Education, Fay Lindsay, adviser to prospective students at the University of New South Wales, Ray Reece from the Sydney Career Reference Centre, Phillip Moore from the (then) Department of Employment and Industrial Relations, David Lang, Assistant Director of the New South Wales Department of Labour and Industry's Division of Vocational Guidance, Angela

Glover from Henry Kendall High School and a number of other practising careers advisers from New South Wales high schools. The lectures cover career planning objectives, the role of the careers adviser, the establishment of a school careers centre, learning about further and higher education, vocational guidance and employment services, career exploration and recreation camps for country students, work experience programs and insights into the running of career education programs by practitioners. Although the kit is particularly relevant to the needs of New South Wales teachers, much that is discussed has a wider relevance.

(c) *Career education program*

The growing enthusiasm of careers advisers for their role within the school has given rise to a proliferation of career education programs across the country. A 1978 exhibition of career education, social education and personal development resources by Peggy Hull, librarian of the New South Wales Northern Districts Education Centre Co-operative (since listed in a most useful bibliography) displayed material and programs from all states. It would be foolish to read too much into the large number of unpublished New South Wales programs on display -- there must be a natural limit to the size of the resource packet that any department is prepared to send interstate; sufficient, perhaps, to say that the states with the most prolific writers appear to be New South Wales, South Australia and Victoria.

The majority of programs continue to be modelled upon the two main types mentioned earlier, the 'work' oriented model and the 'life-skills' model. The change that is reflected in the most recent programs I have seen is in the wider definition of 'work' which may in future bring the two models much closer together. The broadening of the concept of 'work' has again filtered through from the United States, where, in 1976, Kenneth Hoyt, Director of the Office of Career Education within the United States Office of Education, responded to an article by W. Norton Grubb and Marvin Lazerson, 'Rally round the workplace: continuities and fallacies in career education', published in the November 1975 issue of the *Harvard Education Review*. The article hit the headlines of two national newspapers with its claims that career education was little more than 'a renewal and expansion of vocational education' (p. 472).

'In his reply 'Setting the record straight: a reply to Grubb and Lazerson' (a chapter in his 1976 monograph, *Refining the career education concept*) Hoyt took pains to point out, among five other major statements concerning the differences between vocational education and career education, that whilst vocational education 'concerns itself with a particular segment of students at the secondary and postsecondary level, career education concerns itself with *all* students at *all* levels of education' and that whilst 'vocational education's primary concern is the world of paid employment, career education is concerned about both paid employment and with unpaid work, including volunteerism, work of the homemaker, and work done as part of productive use of leisure' (Hoyt 1976a:23).

Donald Super was also refining the meaning of work in 1976 and chose as his definition:

> The systematic pursuit of an objective valued by oneself (even if only for survival) and desired by others; directed and consecutive, it requires the expenditure of effort. It may be compensated (paid work) or uncompensated (volunteer work or an avocation). The objective may be intrinsic enjoyment of the work itself, the structure given to life by the work role, the economic support which work makes possible, or the type of leisure it facilitates. (Super 1976:20.)

In a second monograph in 1977, Hoyt looked again at the many less enjoyable examples of work. 'One reason some people don't like their jobs is that they, in fact, have awful jobs — jobs that are dull, repetitive and lacking in challenge or meaningfulness, he admitted. However, even for these people 'the need to find a personal meaningfulness through work, as part of their total life-style, is present. Where that need cannot be met in the world of paid employment, it should certainly be met through productive use of leisure time' (Hoyt 1977:3.)

Hoyt instances Japan as the country which has most clearly understood the need to regard leisure needs as part of work needs — that apparent need of industrialised man to be doing something rather than nothing. The meaning of 'productive leisure' is nowhere clearly stipulated, but the U.S. Office of Education has been happy to use his definition of 'work' as 'conscious' (that is 'chosen') effort, other than that whose primary purpose is either coping or relaxation, aimed at producing benefits for oneself or for oneself and others, and leisure activities that help to boost one's morale or belief in self would presumably fall under this banner.

This inclusion of non-paid work and leisure patterns in the definition of work and career can be seen in the quotation with which this paper begins, and plainly gives most limitless scope to teachers of subjects less readily seen to be directly related to the world of paid employment. Some Australian teachers appear to have taken the broader definition very seriously — so seriously in fact that learning about parenting, social relations, drug avoidance and sexual control has on occasion been made so central that the actual content of the paid employment has barely been discussed at all. Whilst it would be an exaggeration to say that the occupations themselves have disappeared from career education programs, it is noticeable that the detailed studying of occupational clusters (that is related occupations in broad occupational 'fields'), which was regarded in the early days of career education as one of the most important features of any course, is beginning to be played down, whilst provision for the study of leisure activities and 'coping skills' seems to be receiving much stronger emphasis. The notion of actually choosing an occupation as part of a career education program seems to be anathema to all course writers. This may be due to a belief that career choice is a matter for the personal interview rather than the career lesson. It may also reflect a natural cautiousness in the face of work experience programs, which, of necessity, cover only a narrow range of employment opportunities and are not meant to be regarded as pre-employment experience.

Issues for the Future

I see four major issues facing career education at the present time: the relationship between career education and employment; the role of the teacher in careers advising and career education; the current training of teachers to assume the responsibilities associated with career education; and the evaluation and marketing of career education, so that the community may consider its value and become involved in its growth and improvement.

(a) *The relationship between career education and employment*

Is career education about preparing students for a career? The answer would appear to be 'no' for all sorts of reasons. The first given definition of 'career' in the *Shorter Oxford English Dictionary* is the 1534 'race-course', and the second 'a short gallop at full speed' from which one proceeds via shooting stars and hawks to 1803 and a profession affording opportunities of advancement'. 'Vocation', with its overtones of divine guidance, was retained for religious employment and for employment that required specialist training of natural aptitudes for particular trades or professions. Since neither 'career' with its connotations of security and upward mobility, nor 'vocation', with its connotations of 'calling' and natural aptitude could be enjoyed by the majority, the western world accepted 'job' to cover the employment taken up by the less endowed and less educated, whilst euphemisms such as 'occupation' and 'position' took care of middle class white collar employment and employment undertaken by those who didn't have to earn in order to survive. All of these could be covered by the neutral term 'work' which could be made more explicit by the use of a judicious adjective ('dirty', 'demanding', 'rewarding', 'vital' and so on).

Concern about the speeding up of social and technological change has made inroads upon the notion that preparation for any of these is preparation for a single form of employment for a whole lifetime, and even the notion of preparation for a profession that will last unchallenged for a lifetime is open to question. Career education with its theoretical framework of developing, and refining and deliberating and crystallising, seems to have been caught in a cleft stick because of this. Because it has seemed inappropriate, particularly at the present time to talk of preparing for a career or even a series of careers.* career education would seem to be coming perilously near to being a lot of endeavour with no apparent goal in sight — to be a movement towards something much more vague such as 'learning to be', or 'learning to cope with life'. There is nothing wrong with such aims within education, but they don't seem to me to have very much to do with preparation for that

*It should perhaps be pointed out that not all those interested in the preparation for paid employment share the general pessimism concerning technological change. Discussing opportunities and requirements for re-training Kangan attacks the notion that 'because of technological change people will have to replace their skills three, four or more times during their working lives'. He states that this is 'arrant nonsense' and 'should be stopped for all time' in view of the likelihood of its 'reducing people's confidence in training for skill'. What really happens, he suggests 'is that some kinds of "unskilled" and "semi-skilled" jobs increase and others disappear, but the time needed to acquire a modified work method for the emerging jobs is minimal. This can hardly be described as changing skills often in a life-time'. (Kangan 1976:8).

'purposive activity (which) includes paid employment . . .' with which the quotation heading this paper began.

This is not to detract from the need to prepare students to consider the possibility of new and perhaps radically different ways of sharing employment, or for periods of enforced non-employment for all workers, which may include preparation for leisure, but rather to draw attention back to Hoyt's warning in 1977 that whilst the world of work is not completely synonymous with the world of paid employment:

> . . . economic values, for most persons, lie at the base of their system of work values . . . Individuals can be expected to encounter great difficulty incorporating multiple work values into their personal value structures, until, at least to some minimal degree, the economic needs are met. Thus the "world of paid employment" is a crucial and central part of the "world of work". It would be both dishonest and unrealistic if, in our attempts to help individuals find "work" in their total life style, we ignored the "world of paid employment" as a major focus of our efforts. (Hoyt 1977:21.)

I am not arguing here for more defining of career education, but that those who are actually engaged in it should discuss much more rigorously their own interpretation of the wider definition of 'work' and 'career', in terms for instance of the proportion of time that will be devoted to preparation for 'paid employment', to preparation for 'home-making', to preparation for 'leisure-time projects' and to preparation for 'student learning'. Such broad preparation, it might be suggested invites a broader title, 'transition education', perhaps or 'life skills education'. When career education was first written about and talked about in Australia, some six or seven years ago it was in terms of a program that needed the skills of teachers to inform students and co-operate with them in discovering that the world of work is made up of a great many more ways of earning a living over a long period of years than they or the writers of career pamphlets had previously made clear; and that many of life's other decisions, where to live, how many children to have, whether to play ping pong or polo, were tied up with the decisions made during the process of acquiring knowledge about occupations and an occupational self concept. Now I am no longer sure that career educationists agree in viewing their task in anything like these terms.

(b) *The role of the teacher in career advising and career education*

The second issue, that of the way in which career education is to be made a part of general education is also an issue of some substance. The common response in the United States has been that career education is a reform movement intended to change all education so that it becomes more responsive to work values and work needs, (bearing in mind the broad interpretation of 'work').

> . . . career education encourages an emphasis, where appropriate, on the fact that people *use* the knowledge being taught in the world of paid employment.

> . . . career education encourages positive rewards to students for their accomplishments i.e. for the *work* they do as students — by emphasising the importance of developing favorable student attitudes towards work.
>
> . . . career education emphasises that students can and do learn about work in more ways than from textbooks, and more places than in classrooms and from more people than certified teachers.
>
> . . . career education emphasises that a wide variety of community resources can and should be used in helping students through the career development process.
>
> (Hoyt 1977:7.)

If this is the case the role of the teacher would appear to be to go on teaching with an added sensitivity towards the work related needs of his or her students, which might include a greater willingness to allow students *out* of and other people *into* the classroom.

One might ask what additional role this leaves for the specialised 'careers teacher' and the answer may be that the careers teacher becomes a 'careers co-ordinator', someone who administers the career education program, organises work experience, sees that resource material is made available and engages in evaluation; 'something that is the job of "everyone" becomes the work of no one unless somebody is around to encourage the efforts of all' (Hoyt 1976:12). However, it is perhaps important to add that in the American view 'whether the co-ordinator is full-time or part-time, paid or unpaid, a member of the school staff or a person from the community, is not so important as that someone should occupy this role' (Hoyt 1976a:12).

It has been argued most forcibly, mainly in New South Wales, that it is the careers teacher who should be doing the bulk of the teaching and holding full responsibility for the running of a closely worked out career education program. Nor is it difficult to appreciate how easily career education concepts might be dissipated into thin air if altogether left to teachers with little enthusiasm for the task. 'Career education subscribes to the "15-70-15" philosophy', admits Hoyt, 'that holds its reasonable to expect that about 15% of teachers will become enthusiastic almost immediately, about 15% will reject any new ideas for ever, while the remaining 70% will remain as professional skeptics until they have been given time to think it through for themselves' (Hoyt 1976a:20).

However, there may be other difficulties associated with separate career education programs, not least, as was appreciated in the A.C.T. Policy Statement, the difficulty of persuading students to choose career education as an elective subject, particularly at senior level. Some schools have got round this dificulty by making career education a compulsory subject in year 8 or 9, although even this does not fully meet the demands of the developmental approach, upon which career education is supposedly based, which sees different developmental tasks appropriate to each year of career maturation. The almost total absence of career education in the primary school also suggests a gap between career education theory and practice, and it is interesting to note that the only recent reports to recommend the introduction of

career education into primary schools (where it has claimed its greatest success in the American education system) appear to have been the *New South Wales Report of the committee on sexism in education* (p. 21) and the *Victorian Report of the committee on equal opportunity in schools* (majority report p 70), both of which were concerned to combat early sex role stereotyping of occupations.

Whether career education programs are run by a careers teacher or co-ordinated by a careers teacher it is perhaps pertinent to ask how much time such a teacher has left to advise individual students on choice of career. It has certainly never been suggested that personal interviewing and advising is no longer part of the careers teacher's role, and it is itself no sinecure. Looking at the role of the guidance counsellor, Rose writes that 'the preferred counsellor role is now:

> to work with a client over a period of years, commencing well before he plans to leave school, and gradually to narrow his field of choice by eliminating the inappropriate; to enrich choice within this narrowing range by suggesting possibilities that the client is unaware of, and to continue counselling as he establishes himself in his career until he is ready to handle his problems without help.' (Rose 1976:5.)

Whilst Rose was writing about the role of the professional vocational psychologist, I would suggest that this is not too exaggerated a picture of the ideal model dreamed of by the conscientious careers adviser, and already suggestions have been made that it is narrow minded to stop career education at the end of a student's period of formal education — that schools should keep records of the progress of, and attempt to continue their educational assistance to, school leavers. If a careers teacher is expected to adequately fulfil this role as well as teaching and/or administering a career education program, it is small wonder that demands for increased time, facilities and training loom large on the lobbying programs of career education associations. Perhaps such lobbying should be directed towards the establishment of some sort of guidance team and guidance department, such as has been created in many British schools, incorporating the wider pastoral care function.

(c) *The current training of teachers*

If career education is to be the main responsibility of one or two teachers it is reasonable to suppose that greater attention will be paid in future to providing such teachers with the means to gain additional experience and expertise in the career education area, including the opportunity to gain a wider experience of work. The post-graduate diploma program at the Royal Melbourne Institute of Technology has been followed by programs put forward by at least two other colleges, Claremont in Western Australia, and Milperra in New South Wales, and one might expect to see pressure put on other Colleges of Advanced Education to provide similar courses.

Integrated programs, on the other hand, whilst still requiring the co-ordination of a trained expert, may be expected to require many more of the pre-service type of course taught at State College of Victoria — Rusden, although perhaps as a compulsory rather than an elective subject. The difficul-

ties associated with releasing and covering the release of teachers for in-service courses, or alternatively of persuading teachers to attend lengthy out-of-hours courses, has so far militated against any wholly satisfactory use of this form of teacher training in career education.

(d) *The evaluating and marketing of career education*

It is understandable that little has yet emerged in terms of the evaluation and marketing of career education in Australia, although employers and parents are being canvassed for support in at least one area, that of work experience. In the United States it is otherwise and evaluation studies have proliferated to the extent that Enderlein in 1976 was able to produce *A review of career education evaluation studies*.

It is unlikely that any American employer was silly enough to believe that career education would solve unemployment, and indeed Hoyt himself pointed out that even the $14.439 billion spent on various manpower programs between 1964 and 1974 had given rise to 'no significant reductions in (a) the high school drop out rate; (b) the ratio of youth to adult unemployment; (c) the ratio of unemployment among non-white, as opposed to white youth, or (d) the ratio of unemployment among female as opposed to male youth' (Hoyt 1977:1). However, what many employers did appreciate was the *reaffirmation in an educational context of the value of work*. The first of the 'societal objectives' contained in the U.S. Office of Education's policy paper on career education in 1975, was 'to help all individuals to want to work', and all classroom teachers were advised among other things to 'help pupils to acquire and utilise good work habits', and to 'develop, clarify and assimilate personally meaningful sets of work values' (see USOE 1975).

Hoyt realised that school administrators and businessmen would need to see 'some benefits accruing to themselves as well as to students' from career education, if they were to 'play a key and crucial role . . . in an enthusiastic manner and on a continuing basis'. He has taken pains therefore to point out that businessmen and industrialists have supported career education on the grounds that it teaches students to value the American economic system and prepares them to become part of it by restoring 'a positive attitude towards work'.

School administrators have also welcomed it as a vehicle for improving the basic academic skills of students and providing links with the wider community (always of importance in American education). Finally, whilst vocational educators have seen career education as 'a means for gaining greater community understanding for their efforts, as well as a means of attracting more able students', liberal arts educators had seen it 'justifying the key role the liberal arts play in producing students with adaptability skills needed to change with changes in the broader society as well as a means of helping prepare students for productive use of leisure time' (see Hoyt 1977:14).

Such claims offer an interesting challenge to Australian career educationists, who have so far received little encouragement outside the education system, and some backlash from within it when first the Curriculum Development Centre insisted that all delegates to the 1977 Career Education Con-

ference be given a copy of Grubb and Lazerson's paper (but not Hoyt's reply to it), and later when the School's Commission also quoted from Grubb and Lazerson (but not from Hoyt; see Schools Commission 1977). The latter paper, however, brought forth angry replies from career education associations, and a spirited defence of career education from Betty Levy of the Victorian Education Department, published in the December 1977/January 1978 issue of the South Australian *Career Education Project Newsletter*.

Conclusion

Looking at career education from a standpoint of a teacher of senior secondary students who is professionally engaged in neither careers advising nor the teaching of careers I have been particularly interested in the objections to career education made by senior teachers in the United States (see Hoyt 1976b). These range from protests that preparation for work is too narrow a concept for education to protests that it is too broad a concept and cannot possibly live up to its many claims. More substantially, many teachers of senior students have felt insulted by the demand that they relate their subjects to occupations, claiming that their raison d'etre was to persuade their students to enjoy learing for its own sake. Others felt guilty about the inevitable implication of career education that there are more roads to the good life than a college education.

All of these objections hit, of course, at the root of most educational controversies since education became a free for all affair — why education? Looking at the percentage of even senior students who find the meaning of life in study, or at the percenatge who continue *successfully* through college or university, such objections do seem to me a little weak when compared to the need of so many more students to see some relevance to the world of work in current and recurrent education.

From a vantage point in a city here career education has been taken very seriously at the senior level my main concerns are the way in which career education is being implemented and evaluated within the curriculum, a feeling that career education should begin at a much lower level, and a desire that career educationists should make clear, by making as public as possible all the variations in their theoretical and practical philosophies, what it is they are trying to accomplish.

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CONTRIBUTORS TO THIS PUBLICATION

Hon. KIM EDWARD BEAZLEY, A.O., B.A.(W.A.), M.A.(A.N.U.), Hon. LL.D.(A.N.U.), Hon.D.Litt.(Syd.), F.A.C.E.(Hon.). Australian Minister for Education 1972-1975, Member of Parliament for Fremantle, 1945-1977, previously a school teacher, university tutor, college lecturer and tutor-organiser of adult education.

DAVID P. BETHEL. Visitor from the United Kingdom where he is Director of the Leicester Polytechnic. From 1978 to 1980 he was Chairman of the Committee of Directors of Polytechnics in the United Kingdom.

CATHERINE BLAKERS, B.A., Dip.Ed.(Syd.), F.A.C.E. Research Officer for the Australian Council of State School Organisations and teacher at the Canberra Technical College, previously a secondary teacher.

DEXTER COLBOYD DUNPHY, B.A., M.Ed.(Syd.), Ph.D.(Harvard). Professor of Business Administration and Head of the Department of Behavioural Science, University of New South Wales, previously teacher and then lecturer in Sydney and Harvard Universities.

Hon. MARY GENEVIEVE GAUDRON. Deputy President Australian Conciliation and Arbitration Commission.

R. C. GRANT. Principal Training Officer for Myer W.A. Stores Ltd. President of the Australian Institute of Training and Development in Western Australia.

J. C. HENDERSON, B.A., B.Ed.(W.A.), Grad.Dip.Ed.Admin. Staff Development Officer of the Technical Education Division of Western Australia, previously a senior teacher in the secondary education service.

JOHN ALBERT HILL, B.Sc., Dip.Ed.(Adel.). Principal Education Officer, Department of Further Education, South Australia, previously Principal of a Community College and teacher.

Dr. REIMUT JOCHIMSEN. Visitor from West Germany where he is Minister, Science and Research of the State of North Rhein Westphalia, formerly Professor of Economic and Political Science, University of Kiel and then Under-Secretary of State, German Federal Ministry of Education and Science.

LAURENCE ROYCE MILLER, B.Sc., M.Ed., Ph.D.(Oregon), Dip.Comm.(London), Dip.T., T.C. Senior Lecturer, Educational Administration, Sub-dean, Faculty of Education, University of Queensland, previously secondary teacher in New South Wales and Research Associate at the University of Oregon.

CAROL JEAN MORGAN, B.A.(Birm.), Ph.D.(A.N.U.), Dip.Lib., Grad.Dip.Ed.(C.C.A.E.). Teacher with special interest in Career Education, Phillip College, A.C.T., previously teacher in United Kingdom and New South Wales.

PETER WILLIAM MUSGRAVE, M.A., Cert.Ed.(Cantab.), Ph.D. (London), F.A.S.S.A. Professor of Sociology of Education and Dean of the Faculty of Education, Monash University, formerly secondary teacher and lecturer in the United Kingdom.

GEORGE STRAUSS. Visitor from the United States of America. Professor of the Institute of Industrial Relations, University of California, Berkeley, California, an economist who has published extensively in the field of industrial relations.

WILLIAM TAYLOR, B.Sc.(Econ.), Ph.D., Dip.Ed. Visitor from the United Kingdom. Director of the Institute of Education, University of London, previously Professor of Education at Bristol University.

Hon. ROBERT IAN VINER, LL.B.(W.A.). Minister for Employment and Youth Affairs, formerly Minister for Aboriginal Affairs, M.H.R. for Stirling, Western Australia.